

# NEW ZEALAND ASSOCIATION OF PLASTIC SURGEONS ANNUAL SCIENTIFIC MEETING

SUPPORTING PEOPLE  
TO BE THEMSELVES

18-19 August 2023 · QT/Rydges · Queenstown · New Zealand

Meeting Handbook 2023

[nzaps2023.w.events4you.currinda.com](http://nzaps2023.w.events4you.currinda.com)



NEW ZEALAND ASSOCIATION  
of Plastic Surgeons  
*Te Kāhui Whakamōhou Kiri*

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## Wifi / Internet

Wireless internet:

QT-Event

Password:

**QQueenstown**

# Local Organising Committee

Fiona Smithers

Heather Greig

Chris Adams

Trish Amos

Meeting Organiser: Sally Boulton, Events 4 You Limited

# Message from the Convenors

It is a pleasure to be back in picturesque Queenstown for the 24th NZAPS meeting. We would like to offer a special welcome to our national and international keynote speakers and to those members of ASPS who have travelled across the Tasman.

We bring you an innovative and exciting programme inclusive of transgender medicine and surgery, clinical reflections, paediatric plastic surgery resources in New Zealand, an update on what the future may hold in terms of training plastic surgeons to be, and primary research papers.

Our welcome function at the Rydges Lakeland Resort/QT has a Central Otago theme, befitting the surroundings, and the Meeting Dinner will be held at the Gibbston Valley Winery and Restaurant.

Many thanks to our generous sponsors, without whom this conference would not be possible.

Nga manaakitanga

Fiona Smithers, Heather Greig and Chris Adams

# Association

**New Zealand Association of Plastic Surgeons**



The New Zealand Association of Plastic Surgeons / Te Kāhui Whakamōhou Kiri is a non-profit, professional association devoted to the maintenance of excellent ethical and professional standards within the field of cosmetic and reconstructive plastic surgery. Established in August 1976 as the New Zealand Association of Plastic and Reconstructive Surgeons, the Association now represents most of New Zealand's plastic surgeons and provides a strong voice for plastic surgeons in discussions with the government, the Ministry of Health and bodies such as the Medical Council of New Zealand, Southern Cross and ACC. NZAPS/TKWK is committed to upholding the highest standards of ethical practice in which the patient's safety and welfare are the first consideration and to upholding the highest standards of surgical excellence, both in clinical practice and in the training of future specialists. NZAPS/TKWK supports the next generation of cosmetic and reconstructive plastic surgeons in New Zealand through supporting the New Zealand Board of Plastic and Reconstructive Surgery deliver the New Zealand Surgical Education and Training Programme.



Royal Australasian  
College of Surgeons  
**CPD Approved**

This educational activity has been approved in the RACS CPD Program. RACS Fellows, Specialist International Medical Graduates (SIMGs) and surgeons participating in the RACS CPD Program can claim one point per hour in Educational Activities (up to 11 points for this event).

Participation in this activity will be entered into your RACS CPD which can be accessed through ehub.

# Programme


## Friday 18 August 2023

**Location:** Queenstown Room, Level 5, Rydges/QT Queenstown unless otherwise stated (Programme may be subject to change)

Time	Presentation / Presenter	Location
08.30-08:45	<b>Welcome and Mihi Whakatau</b>	
08:45-10:45	<b>Session 1: Transgender medicine and surgery</b>	Moderators: Fiona Smithers / Dylan James
08:45-09:15	<b>Keynote: Stan Monstrey &amp; Marlon Buncamper, University Hospital of Gent, Belgium</b> Overview of transgender medicine and surgery: the Belgium experience <i>Supported by:</i> 	
09:15-09:45	<b>Keynote: Rachel Johnson, Paediatrician, Adolescent &amp; Young Adult Medicine Specialist, Auckland</b> Gender affirming care in New Zealand - Before and beyond surgical care	
09:45-10:05	<b>Keynote: Rita Yang – Plastic and Reconstructive Surgeon, Wellington</b> The NZ Experience	
10:05-10:25	<b>Chris Porter – Plastic Surgeon, Christchurch</b> Transmasculine Top Surgery - Personal Experience 2013 - 2023	

## Friday 18 August 2023

**Location:** Queenstown Room, Level 5, Rydges/QT Queenstown unless otherwise stated

Time	Presentation / Presenter	Location
10:25-10:45	<b>Emma Sanchez-Brown, Wellington</b> A Patient's Perspective	
10:45-11:15	<b>Morning Tea and E-Posters with Trade Exhibitors</b> <i>Barista sponsored by:</i> 	Coronet/ Remarkables Level 4
11:15-12:40	<b>Session 2: Transgender medicine and surgery – Part 2</b>	Moderators: Chris Adams / Meredith Simcock
11:15-11:35	<b>Keynote: Stan Monstrey &amp; Marlon Buncamper, University Hospital of Gent, Belgium</b> Vaginoplasty	
11:35-12:05	<b>Keynote: Stan Monstrey &amp; Marlon Buncamper, University Hospital of Gent, Belgium</b> Ethical issues in gender surgery	
12:05-12:30	<b>Keynote: Stan Monstrey &amp; Marlon Buncamper, University Hospital of Gent, Belgium</b> Phalloplasty	

## Friday 18 August 2023

**Location:** Queenstown Room, Level 5, Rydges/QT Queenstown unless otherwise stated

Time	Presentation / Presenter	Location
12:30-12:40	<b>Michelle Locke, Te Whatu Ora Health NZ, Counties Manukau and University of Auckland</b> Public access to top surgery in Auckland	
12:40-13:45	<b>Lunch</b>	Coronet/ Remarkables
13:45-15:15	<b>Session 3: Multidisciplinary Teams Panel</b> Stan Monstrey, Marlon Buncamper, Rita Yang, Rachel Johnson, Chris Porter	Moderator: Chris Adams
15:15-15:35	<b>Free Papers A</b>	
15:15-15:25	<b>Kelsey Ireland</b> A systematic review of PROMS measured health-related outcomes following treatment of gender incongruence (1586)	
15:25-15:35	<b>Debanjan Ghosh</b> New frontiers in implantable device for FTM phalloplasty (1617)	
15:35-16:05	<b>Afternoon Tea and E-Posters with Trade Exhibitors</b> <i>Posters Sponsored by:</i> <b>Smith+Nephew</b>	

## Friday 18 August 2023

**Location:** Queenstown Room, Level 5, Rydges/QT Queenstown unless otherwise stated

Time	Presentation / Presenter	Location
16:05 –17:05	<b>Session 4: Clinical Practice Reflections</b>	Moderators: Heather Greig / Murray Beagley
16:05 –16:25	<b>Swee Tan – Gillies McIndoe Research Institute, Wellington</b> In search of a better way – My research journey	
16:25 – 16:45	<b>Craig Mackinnon, Te Whatu Ora Health NZ, Hutt Valley, Wellington</b> Rhinoplasty – what I've learnt in 20 years of practice	
16:45 –17:05	<b>Brandon Adams &amp; Tea Williams, Te Whatu Ora Health NZ, Bay of Plenty</b> Ten years of melanoma sentinel node biopsies in New Zealand	
17:05-17:25	<b>Free Papers B</b>	
17:05 –17:15	<b>Eric Kim</b> Are the results of the MSLT-II study relevant for us in New Zealand? (1588)	
17:15 –17:25	<b>Kristy Toy</b> Regional lymph node clearance versus non-operative management for sentinel node positive melanoma in Counties Manukau (1629)	
17:30 – 19:00	<b>Central Otago Wine Welcome Function with Trade Exhibitors</b>	Coronet/ Remarkables

## Saturday 19 August 2023

**Location:** Queenstown Room, Level 5, Rydges/QT Queenstown unless otherwise stated

Time	Presentation / Presenter	Location
08:30-08:50	<b>Free Papers C</b>	Moderators: Craig Mackinnon / Amelia Boucher
08:30 - 08:40	<b>Benny Tan</b> Lessons learned from the service line approach to Transgender Health, and crossover opportunities in Aotearoa (1552)	
08:40 - 08:50	<b>Nicola Peat</b> Are our current recommendations for surgical supervision of Trainees fit for purpose? (1619)	
08:50 - 10:25	<b>Session 5: Plastic Surgery Training</b>	
08:50 - 09:15	<b>Keynote: Marlon Buncamper, University Hospital of Gent, Belgium</b> Training for registrars and SMO's in transgender surgery	
09:15 - 09:35	<b>Terry Creagh, Te Whatu Ora Health NZ, Canterbury</b> Plastic Surgery Training in New Zealand	
09:35 - 10:05	<b>William Blake, Chair, Australian Board of Plastic Surgery, VIC, Australia</b> Competency based training in PRS Australia	
10:05-10:25	<b>Patrick Lyall, Te Whatu Ora Health NZ, Southern</b> The Dunedin Department	
10:25-10:55	<b>Morning Tea and E-Posters with Trade Exhibitors</b>	Coronet/ Remarkables

## Saturday 19 August 2023

**Location:** Queenstown Room, Level 5, Rydges/QT Queenstown unless otherwise stated

Time	Presentation / Presenter	Location
10:55-12:35	<b>Session 6: National Paediatric Services</b>	Moderators: Sandhya Deo / Richard Wong She
10:55-11:15	<b>Emily Yassaie, Te Whatu Ora Health NZ, Hutt Valley, Wellington</b> – Facial differences	
11:15-11:35	<b>Charles Davis, Craniofacial Unit, Wellington</b> Central & Southern NZ Craniofacial Programme	
11:35-11:55	<b>Jonathan Wheeler, Starship, Auckland</b> – Craniofacial and paediatric plastic surgery	
11:55-12:15	<b>Sarah Gardiner, Te Whatu Ora Health NZ, Canterbury</b> – ‘(Paediatric) Canadisms in Christchurch’ & National Cleft Service update	
12:15-12:35	<b>Paul Baker, Te Whatu Ora Health NZ Counties Manukau, Auckland</b> Paediatric burn care at the NZ National Burn Centre	
12:35-13:35	<b>Lunch with Trade Exhibitors</b>	Coronet/ Remarkables
13:35-14:25	<b>Free Papers D</b>	Moderators: Heather Greig / Fiona Smithers
13:35-13:45	<b>Jon Mathy</b> Prophylactic InCisional antibiotics in skin surgery: the PICASSo Trial (1579)	

## Saturday 19 August 2023

**Location:** Queenstown Room, Level 5, Rydges/QT Queenstown unless otherwise stated

Time	Presentation / Presenter	Location
13:45-13:55	<b>Fouad Nahab</b> Corneal neurotisation, an eye saving procedure - the New Zealand experience (1581)	
13:55-14:05	<b>Nicholas Brougham</b> Trends in gender affirming chest surgery at Counties Manukau Plastic Surgical Centre (1595)	
14:05-14:15	<b>Sinem Gultekin</b> The future of artificial intelligence in plastic surgery (1596)	
14:15-14:25	<b>Sabrina Koh</b> Do >5mm margins lead to superior survival outcomes in oral cavity squamous cell carcinoma? (1625)	
14:25-14:35	<b>Message from Evolution Healthcare</b>	
14:35-15:00	<b>Judging / Prizegiving / Announcement of 2024 ASM Meeting / Closing</b>  Prizes sponsored by: 	
15:00-15:30	<b>Afternoon Tea and E-Posters with Trade Exhibitors</b>	Coronet/ Remarkables
15:30-17:30	<b>New Zealand Association of Plastic Surgeons Annual General Meeting</b>	
18:30-19:00	<b>Transport to Dinner</b> Buses depart 6.30 pm Rydges Lakeland Resort, 38-54 Lake Esplanade	Main Entrance (Ground Floor) Rydges
19:00-Late	<b>Meeting Dinner</b>  Sponsored by: 	Gibbston Valley Winery, 1820 State Highway 6

# Electronic Poster Index

E-Posters sponsored by: **Smith+Nephew**

Displayed online and in the Trade Exhibition area  
Coronet/Remarkables Room Level 4

ID		Presenting Author
1549	<i>Imaging of spinal cord injuries from high voltage electrical burns</i>	<b>Jessica Papali'i-Curtin</b>
1550	<i>Livedo reticularis in burns: a case study and literature review"</i>	<b>Jessica Papali'i-Curtin</b>
1553	<i>Injectable polyacrylamide hydrogel breast augmentation - a challenging mastectomy and reconstruction</i>	<b>Mark Edmondson</b>
1554	<i>Digit preserving surgery in acral lentiginous melanoma of the hand - Can we avoid amputation?</i>	<b>Sinem Gultekin</b>
1555	<i>Interdigitating dendritic cell sarcoma - a rare diagnostic challenge</i>	<b>Grace Boyd</b>
1557	<i>Metastatic BCC - A rare outcome in a common malignancy. Case series and literature review</i>	<b>Maxim Devine</b>
1560	<i>Novel application of biodegradable temporising matrix for perineal reconstruction of extra-mammary paget's disease</i>	<b>Maxim Devine</b>
1561	<i>Perineal defect reconstruction following pelvic exenteration and abdominoperineal resection: Proposed patient information sheet</i>	<b>Maxim Devine</b>
1563	<i>A rare case of a basomelanocytic tumour</i>	<b>Daniel Wen</b>
1566	<i>Biodegradable temporising matrix (BTM) for complex cancer reconstruction - The Peter MacCallum Cancer Centre cohort</i>	<b>Peter Gearing</b>
1567	<i>Exploring cutaneous malignancy reconstruction: A case series and literature review of an innovative approach</i>	<b>Peter Gearing</b>
1568	<i>Establishing a clinical management protocol for osteoradionecrosis of the calvarium</i>	<b>Peter Gearing</b>
1573	<i>Surgical management of hidradenitis suppurativa: a case study</i>	<b>Emily Horan</b>
1574	<i>Thumb salvage surgery for dermatofibrosarcoma protuberans: A case report and review of the literature</i>	<b>Emily Horan</b>

**Poster Display Index**  
**Displayed online and in the Trade Exhibition area**  
**Coronet/Remarkables Room Level 4**

ID		Presenting Author
1575	<i>A spoonful of sugar!</i>	<b>Hannah Linkhorn</b>
1577	<i>A comprehensive review of vaginoplasty: Tracing the historical evolution of surgical techniques</i>	<b>Jake Hindmarch</b>
1578	<i>The historical development of phalloplasty</i>	<b>Jake Hindmarch</b>
1580	<i>Rugby facial fractures in New Zealand - the price of our national sport</i>	<b>Jade Lau Young</b>
1585	<i>Full functional recovery of multiple flexor tendon injuries in a concert pianist</i>	<b>Terry Le</b>
1587	<i>History of transgender surgery</i>	<b>Sinem Gultekin</b>
1589	<i>Persistent non-nasal velopharyngeal incompetence secondary to cicatrix: Evaluation and management of a rare tonsillectomy complication.</i>	<b>James Doherty</b>
1590	<i>Ear splinting using duoDERM: A novel technique for correcting neonatal ear deformities</i>	<b>Rupert W Hobson</b>
1592	<i>Biodegradable temporising matrix, a limb saving adjunct in reconstructive surgery</i>	<b>Mu-Ming (Marcus) Pan</b>
1593	<i>Pre-operative inflammatory markers in upper limb infections</i>	<b>Aaron Chester</b>
1599	<i>The utility of supraclavicular flaps: An update through the experience of a regional institution</i>	<b>Caroline Lam</b>
1602	<i>Gracilis interposition flap for colo-urinary fistula reconstruction post radical prostatectomy: Case series review of literature</i>	<b>Minhao Hu</b>
1603	<i>“Z-Abdomoplasty”: A modified stoma-preserving approach for recontouring of the colostomized abdominal wall</i>	<b>Minhao Hu</b>
1607	<i>Microsurgical Intraoperative Capillary Outflow System (MICOS): A novel but accessible approach to microsurgical drainage</i>	<b>Minhao Hu</b>
1609	<i>Trends in head and neck lymphoedema management: a review</i>	<b>Jennifer Jihyun Lee</b>
1616	<i>Sclerosing perineurioma of a dorsal finger: A rare lesion</i>	<b>Terry Le</b>
1618	<i>Choosing wisely: The advantages of autologous breast reconstruction over breast implants</i>	<b>Jeremy Bishay</b>

**Poster Display Index**  
**Displayed online and in the Trade Exhibition area**  
**Coronet/Remarkables Room Level 4**

ID		Presenting Author
1621	<i>25-years of major head and neck surgery at the Wellington Regional Head and Neck Unit</i>	<b>Sabrina Koh</b>
1623	<i>Prevalence and predictive factors for occult nodal disease in oral cavity squamous cell carcinoma</i>	<b>Sabrina Koh</b>
1628	<i>Scleroderma related calcinosis cutis treated with topical sodium thiosulfate: Photographic case report and literature review.</i>	<b>James Bozzi</b>
1632	<i>Salvage free-flap reconstruction of deep sternal wound infections: can we use the internal mammary vessels?</i>	<b>Jenaleen Law</b>
1633	<i>Complex nasal reconstruction: alternatives to forehead flap</i>	<b>Debanjan Ghosh</b>



# Exhibitor Draw

We would like to acknowledge all of the trade exhibitors supporting the Meeting this year (see page 66 for a full list). This year we will be encouraging delegates to get around and visit all of the booths at the refreshment breaks.

There will be a Draw for one prize of two bottles of Felton Road 2022 Pinot Noir MacMuir. Delegates should collect a stamp from each trade exhibitor on the Trade Exhibitor Draw form attached at the back of this handbook. Completed forms should be handed in to the Registration Desk on Level 4 by 1.30 pm Saturday to qualify.

The winner will be drawn at the prizegiving session on Saturday at 2.30 pm. The winner must be present otherwise there will be a re-draw.



# Keynote Speakers

## Professor Marlon E Buncamper

UZ Gent, Belgium



Marlon E. Buncamper is an academic plastic and reconstructive surgeon with a high volume, full time practice in gender affirmation surgeries.

After having completed his medical training at the Maastricht University in the Netherlands, he entered plastic and reconstructive surgical specialty training at the University Hospital of Gent in Belgium under the tutelage of Prof. Monstrey and Prof. Blondeel.

Between 2010 and 2020, Marlon worked as a consultant plastic surgeon at the Centre of Expertise on Gender Dysphoria at the VU University Medical Centre of Amsterdam. In 2020, he was made head of gender surgery at the University Hospital of Gent, a world-renowned gender program which offers 250 gender affirming /genital reconstructive surgeries a year.

Dedicated to the multidisciplinary approach in gender affirmation care, Professor Buncamper further trained in sexual medicine, became a fellow of the European Society of Sexual Medicine in 2013. In 2016, he was awarded his PhD for his research on penile inversion vaginoplasty.

Besides his clinical work, Marlon has a keen interest in trainee education. He is actively involved in training local and international fellow on both microsurgery and genital reconstructive surgeries both at UZ Gent and international forums.

# Keynote Speakers

## Stanislas Monstrey MD PhD Emeritus

Department of Plastic Surgery, Gent University Hospital, Belgium

Prof. Monstrey is an Emeritus Professor of plastic surgery at the University Hospital of Gent. Since 2002, he led both the burn service and the gender program (Centre of Sexology and Gender) at the University Hospital of Gent (UZ Gent) before serving as the Chairman of the Department of Plastic and Reconstructive Surgery at UZ Gent until 2018.



A warm and avid educator, Professor mentored generations of Belgium plastic surgeons through board of training for the Royal Belgium Society of Plastic Surgery and later as the president of the society between 2009-2011. He has served as the secretary general of EURAPS (European Association of Plastic Surgeons) between 2001- 2007 and as the president of EURAPS 2012-2013.

For the past 30 years, he also generously shared his knowledge with international fellows particularly for his work in gender affirming genital and chest reconstructions. Since 2003, Prof. Monstrey has co-authored over 320 journal articles, 21 book chapters and 7 books on gender affirmation surgeries, many of which are considered authoritative in this field.

Considered one of the world's foremost gender affirmation surgeon, Prof. Monstrey served on the board of WPATH (World Professional Association of Transgender Health) between 2000-2007 and have given many keynote lectures on gender affirmation surgeries internationally, including the Maliniac Lecture for the American Society of Plastic Surgery in 2019. It was during his tenure as the president of WPATH (2005- 2007) he founded a dedicated surgeon's programme with the goal to promote evidence based gender surgery practice and transparency in outcome reporting. These work influence significantly the WPATH Standards of Care Guideline which informs most country's gender affirmation care pathways today.

## Rachel Johnson

Paediatrician, Adolescent and Young Adult Medicine Specialist, Auckland

Rachel is a paediatrician, adolescent and young adult medicine specialist who works at the Kidz First Centre for Youth Health in South Auckland. She has been providing gender affirming care and support to children, adolescents and their families for over 10 years.



She was involved in the development of the Guidelines for gender affirming healthcare for gender diverse and transgender children, young people and adults in Aotearoa New Zealand and has been on the executive of PATHA (Professional association for transgender

## Rita Yun-Tai Yang

Plastic and Reconstructive Surgeon, Wellington

Rita is a plastic and reconstructive surgeon with an interest in gender affirmation surgeries and breast reconstructions. Currently based full time in private practice from both Auckland and Wellington.



Rita is contracted with Te Whatu Ora in providing publicly funded assessment and genital gender affirming surgeries in New Zealand.

# General Information

## Website

**[nzaps2023.w.events4you.currinda.com](https://nzaps2023.w.events4you.currinda.com)**

## Registration and Information Desk - Level 4

The registration desk is situated in the foyer on Level 4 outside the Coronet/Remarkables Room, QT/Rydges Hotel. The Plenary sessions will all take place in the Queenstown Room on Level 5.

We welcome your enquires on any conference detail. The desks will be open at the following times:

Thursday	2.00 pm - 5.00 pm
Friday	8.00 am - 7.30 pm
Saturday	8.00 am - 3.30 pm

## Contact Phone Numbers

Registration Desk Staff: 027 562 5949

Queenstown Taxis (Bluebubble): 03 450 3000

Airport Shuttle: [www.supershuttle.co.nz](http://www.supershuttle.co.nz)

Police/Ambulance/Fire: 111

Queenstown Medical Centre: 03 441 0500

## Abstracts

Abstracts for the presentations and posters are both available in this handbook and also electronically (delegates have been sent a link for the e-poster dashboard).

## Attendee List

There is a list of conference attendees available at the registration desk. Please note this only includes delegates who have consented to having their information included.

## Certificate of Attendance & Evaluation

A certificate of attendance will be emailed directly to delegates following the conclusion of the conference along with a delegate survey.

## COVID-19 Considerations

This event will comply with the current Government COVID-19 regulations that apply at the time of the conference. Attendees should not attend this event if they have symptoms. Hand sanitiser has been provided. Any change in COVID-19 levels may require a change in the advertised programme and/or venue layout at short notice.

## Defibrillator Location

A defibrillator is located on Level 6 by the pool door (close to the restaurant and bar).

## Internet Access

Wireless internet: QT-Event Password: QQueenstown

## Toilets

There are toilets located on the 5th & 6th Floors (there are no toilets on the 4th floor)

## Mobile Phones/Devices

Mobile phones are allowed in the conference rooms, however please turn all devices to silent mode. Delegates are not permitted to take any photographs or screen shots in the conference room.

## Name Badges

All conference attendees and industry representatives are requested to wear their name badges at all times during the conference and social functions. It is your official entrance pass to the sessions and conference catering.

We invite you to return your name badge to the registration desk at the end of the conference for recycling.

## Parking

Car parking at the venue is available to guests at NZ\$15 per night. There is no reservations, limited spaces, first come first served.

## E-Poster Display

E-Posters will be displayed on three display screens in the trade exhibition area - they will also be available online via the livestream dashboard.

Please take time to view the poster displays during refreshment breaks.

*E-Posters sponsored by:*

## Smith+Nephew

### Prizes: Registrar Presentations

NZAPS Prizes include Best Presentation NZ\$800, 2nd Best Presentation NZ\$400, Best Poster NZ\$300. Presentations take place on Saturday afternoon.

*Sponsored by:*



## Catering and Special Diets

Catering includes morning tea, lunch, afternoon tea on the days of registration which will be served in the Coronet/Remarkables Room on Level 4. The meeting dinner is not included with registration, please see the registration desk to purchase tickets.

Vegetarian options are included in all refreshment breaks. If you have advised any special dietary requirements on your registration these would have been notified to the caterers. All lamb, beef, chicken served at the main conference venue is certified Halal. Please make yourself known to the catering staff if you require help finding your meal.

*Barista Coffee will be available in the Trade Exhibition Area and has been sponsored by:*



## Dinner/Breakfast Options at QT:

Bazaar Restaurant Level 6 - Breakfast 7-10am or 7-11am weekends

Lil Red Level 6 - Dinner - reservations essential 03 450 1336

Red's Bar Level 6 - 2pm-10pm

## Suggestions for Dining Queenstown CBD:

Blue Kanu, 16 Church Street [bluekanu.co.nz](http://bluekanu.co.nz)

ph: 03 442 6060

Botswana Butchery, 17 Marine Parade [botswanabutchery.co.nz](http://botswanabutchery.co.nz)

ph: 03 442 6994

Jervois Steak House, 8 Duke Street [jervoissteakhouse.co.nz](http://jervoissteakhouse.co.nz)

ph: 03 442 6263

Rata, 43 Ballarat Street [ratadining.co.nz](http://ratadining.co.nz)

ph: 03 442 9393

**More dining options: [queenstownnz.co.nz](http://queenstownnz.co.nz)**

# Presentation Information

## Oral Presentations

All presenters will have provided their presentation slides in advance. All presentations will take place in the Queenstown room. A dedicated AV technician will be managing the presentations. Presenter View will be available to all presenters so they can view their notes during their presentation from the lectern. Presentations must not exceed the allotted time which includes Q&A. A timekeeper will indicate 2 minutes and 1 minutes remaining.

## E-Poster Presenters

All posters will be electronic this year. Poster authors will have submitted their Powerpoint files previously. E-posters will be available to view on screens in the trade exhibition/refreshment break area in the Coronet/ Remarkables Room on Level 4. These will also be available to view online - all delegates have been sent the link for the E-Poster Dashboard.

## Late Changes

With such a high volume of presentations, oral and poster presentations, files cannot be changed once submitted.

If for any reason, a presenter can no longer be available to present, we ask them to contact the Meeting Organiser immediately by email [sally@events4you.co.nz](mailto:sally@events4you.co.nz) or by reporting to the Registration Desk located in the Level 4 Foyer.

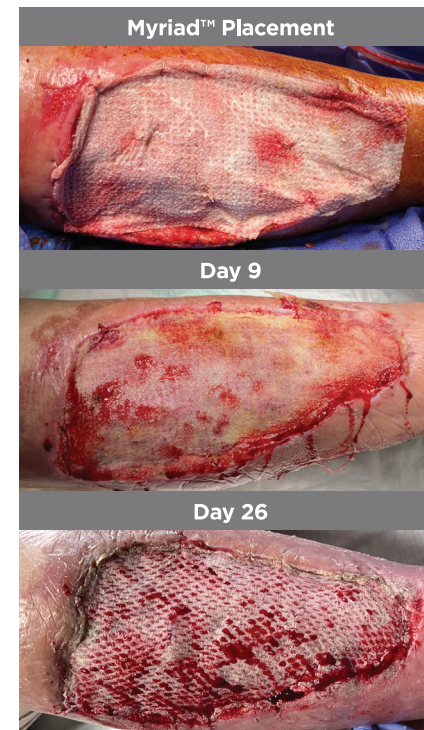
Any last minute changes to the programme will be reflected on the online programme on the Meeting website.

# Myriad™

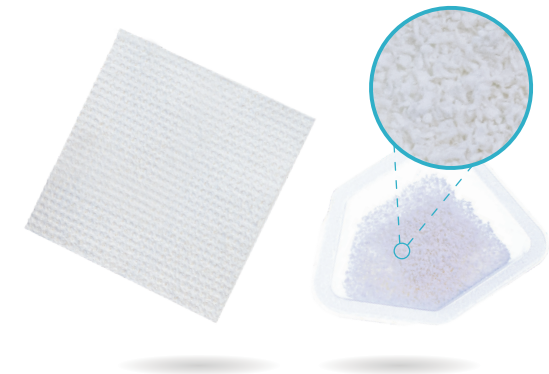
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References: 1. Bohn, G. A. and A. E. Chaffin (2020), "Extracellular matrix graft for reconstruction over exposed structures: a pilot case series," J Wound Care 29(12): 742-749. Available at: <https://www.magonlinelibrary.com/doi/full/10.12968/jowc.2020.29.12.74217> 2. Chaffin A et al. Surgical reconstruction of pilonidal sinus disease with concomitant extracellular matrix graft placement: a case series, Journal of Wound Care, Vol 30, No. 7, July 2021. <https://www.magonlinelibrary.com/doi/full/10.12968/jowc.2021.30.Sup.7.528>

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[www.aroa.com](http://www.aroa.com)

# Social Events

## Central Otago Wines Welcome Function

**Venue** Trade Exhibition, Level 4, Rydges & QT  
**Date** Friday 18th August 2023  
**Time** 5.30 pm – 7.00 pm  
**Dress** Smart Casual

Join our Trade Exhibitors in the Welcome Function which will feature wines from Central Otago. Visit our sponsors Aroa Biosurgery, Evolution Healthcare, Polynovo and Smith + Nephew and the NZAPS stand who will all be hosting a label on the night.



## Aroa Biosurgery Meeting Dinner

**Venue** Gibbston Valley Winery & Restaurant  
**Date** Saturday 19th August 2023  
**Time** 7.00 pm for 7.30 pm  
**Dress** Smart Casual (tie optional)  
**Price** \$150



The Meeting dinner will be held at Gibbston Valley Winery this year with buses departing from Rydges main entrance at 6.30 pm sharp. Dinner includes 3 course meal and drinks. Buses will return 10.30 pm and 11.00 pm



# Abstracts: Oral

In Alphabetical Order  
(presenting author surname)

id #1595

## Trends in gender affirming chest surgery at Counties Manukau Plastic Surgical Centre

**Nicholas DL Brougham<sup>1</sup>, Sashika Samaranayaka<sup>1</sup>, Rachel E Johnson<sup>2</sup>, Michelle B Locke<sup>1</sup>**

1. Regional Centre for Plastic, Reconstructive & Hand Surgery, Middlemore Hospital, Te Whatu Ora, Counties Manukau, Auckland, New Zealand

2. Kidz First Centre for Youth Health, Te Whatu Ora, Counties Manukau, Auckland, New Zealand

**Background & Objectives:** Gender affirming chest surgery, (“Top surgery”) is an important component of transition for some members of the transgender population which can substantially improve gender incongruence and dysphoria. Publicly funded top surgery in the Northern region (Auckland, and Northland) is undertaken by the Plastic Surgery Department at Middlemore Hospital, Te Whatu Ora, Counties Manukau. The aim of this study is to evaluate the trend in top surgery in the department and its’ impact on elective surgery resource.

**Methods:** A retrospective review was undertaken over an 11-year period from the 1<sup>st</sup> January 2012 to 1<sup>st</sup> January 2023. Utilising local category surgery codes, 114 transgender cases referred to the Plastic Surgery Department at Middlemore Hospital for gender affirming chest surgery were identified. These cases were analysed to evaluate referral trends, patient demographics, service delivery, and health resource utilised. As well as post-operative complications.

**Results:** Between 2011 and 2020 referrals to the Plastic Surgery Department at Middlemore Hospital for gender affirming chest surgery increased by 3.2 patients per year ( $P < 0.01$ ). Transmasculine patients comprised the vast majority of referrals ( $n=114$ , 95.6%). Median age at surgery was 26 years. The majority were European ( $n=77$ , 68%). Elapsed time from accepted referral to FSA, and FSA to primary surgery was 130.75 (95% CI; 116.50 – 145), and 234.90 (95% CI; 203.14 – 265.65) days respectively. Average number of procedures was 1.46 (95% CI; 1.31 - 1.60), and total operative time was 278 minutes (95% CI; 259.4 – 296.4) respectively per patient.

**Conclusions:** The Plastic Surgery Department at Middlemore Hospital has experienced an increase in demand for top surgery amongst the transgender population. We expect this to continue to increase, in line with the increasing transgender population. This underscores the importance of developing a sustainable health-care delivery model to service this growing population group.

id #1617

## New frontiers in implantable device for FTM phalloplasty

**Debanjan Dr Ghosh<sup>1</sup>, David Dr Caminer<sup>2</sup>**

1. St Vincent’s Hospital Sydney, Darlinghurst, NSW, Australia

2. St Vincent’s Hospital Sydney, Strathfield, NSW, Australia

**Background:** Penile prosthesis transforms an otherwise aesthetic organ into a functional sexual organ for a transgender man. Traditional erectile devices have been manufactured in accordance with the anatomy of the native penis. While this had favourable outcomes for the biological male with erectile dysfunction, it has been complicated by host of morbidities including protrusion, infection and malfunctioning, ultimately leading to high explantation rate post phalloplasty. ZSI 475 FTM is the first erectile device designed exclusively for the neophallus. It is still relatively unused in Australasia, though used in several large centres across Europe since 2016.

**Method:** This presentation will demonstrate the first use of this device in a transgender FTM patient in Oceania. A 21 patient underwent gender reassignment surgery with innervated radial artery forearm free flap to create neophallus in December 2021. With good healing and preserved clitoral (glans) sensation, he underwent implantation of ZSI 475 implant in May 2023. The inflatable penile implant was placed in the neophallus posterior to the urethra, the spherical testicle-shaped manual pump being implanted into the left hemiscrotum to create neo-testicle and the saline filled reservoir in the pelvis through groin crease incision.

**Conclusion:** ZSI 475 inflatable erectile device differs from previously used penile implants in being manufactured specifically for phalloplasty. Based on current literature, short-term cylinder protrusion, malpositioning, urinary retention and mechanical failure rates are low compared to traditional penile prostheses, though in some cases device infection remains a problem. This presentation explores the worldwide literature of its surgical outcomes and patient satisfaction to date and presents the first case with this device in our continent.

1. Neuville et al. First outcomes of the ZSI 475 FTM, a specific prosthesis designed for phalloplasty. *J Sex Med.* 2019 Feb; 16(2):316-322.
2. Verla et al. Implantation of the ZSI 475 FTM Erectile Device after Phalloplasty: A Prospective analysis of surgical outcomes. *J Sex Med.* 2021 Mar;18(3):615-622.
3. Petro et al. The Frontiers of Penile Implants in phalloplasty: Is the ZSI 475 FTM what we have been waiting for? *YSMJ.* 2020 Jul
4. Vagnoni et al. 240 surgical outcome and patient' satisfaction after ZSI 475 penile prosthesis implantation. *J Sex Med.* 2018 Jul; S217.
5. Barnard et al. Technological advances in penile implant surgery. *J Sex Med.* 2021 Jul; 18(7): 1158-1166.

## id #1596

### The future of artificial intelligence in plastic surgery

**Sinem Gultekin<sup>1</sup>, Cameron Keating<sup>1</sup>**

1. *Royal Hobart Hospital, Hobart, Tasmania, Australia*

The use of artificial intelligence (AI) in plastic surgery is already emerging and is expected to play a significant role in the field in the future. With the integration of AI technology, plastic surgeons will be able to improve diagnostic accuracy, enhance surgical planning and make informed decisions, ultimately leading to better outcomes for patients.

One potential application of AI in plastic surgery is the use of predictive analytics to assist with cancer diagnosis. By analysing patient data and medical images, AI could be applied to provide a more accurate diagnosis, especially in relation to skin cancer. AI could allow both clinician and patients to check lesions and provide predictive analysis. If applied widely, earlier detection would lead to earlier therapies and decrease overall health burden.

AI can also be used to improve pre-operative planning. By analysing patient data, AI could be used for pre-operative planning of complex cancer resection, especially in relation to reconstruction, in particular free flap surgery. AI could also be integrated with patient data and medical images for breast implant planning, to help identify the most aesthetic fit and assist with simulation during consultation or intraoperatively.

Furthermore, AI can aid in post-operative care to predict the likelihood of complications. This would be particularly advantageous in relation to post-operative free flap monitoring. AI could monitor patient progress and alert surgeons to any potential complications or changes in free flap observation, this would allow for early intervention and improved outcomes.

In summary, the future of AI in plastic surgery is bright. By leveraging the power of machine learning and advanced imaging technologies, plastic surgeons can provide more accurate, efficient, and personalized treatment to their patients. This technology has the potential to revolutionize the field of plastic surgery and improve outcomes for patients around the world.

1. Jarvis T, Thornburg D, Rebecca AM, Teven CM. Artificial Intelligence in Plastic Surgery: Current Applications, Future Directions, and Ethical Implications. *Plast Reconstr Surg Glob Open.* 2020 Oct 29;8(10):e3200. doi: 10.1097/GOX.0000000000003200. PMID: 33173702; PMCID: PMC7647513.
2. Atiyeh B, Emsieh S, Hakim C, Chalhoub R. A Narrative Review of Artificial Intelligence (AI) for Objective Assessment of Aesthetic Endpoints in Plastic Surgery. *Aesthetic Plast Surg.* 2023 Mar 31. doi: 10.1007/s00266-023-03328-9. Epub ahead of print. PMID: 37000298.
3. Spoer DL, Kiene JM, Dekker PK, Huffman SS, Kim KG, Abadeer AI, Fan KL. A Systematic Review of Artificial Intelligence Applications in Plastic Surgery: Looking to the Future. *Plast Reconstr Surg Glob Open.* 2022 Dec 2;10(12):e4608. doi: 10.1097/GOX.0000000000004608. PMID: 36479133; PMCID: PMC9722565.

## id #1586

### A systematic review of PROMS measured health-related outcomes following treatment of gender incongruence

**Kelsey A Ireland<sup>1</sup>, Nicola R Dean<sup>2</sup>**

1. *Te Whatu Ora, Christchurch, Canterbury, New Zealand*

2. *Plastic and Reconstructive Surgery, Flinders Medical Centre, Adelaide, South Australia*

**Background:** Gender diverse people experience overall poorer health outcomes when compared to cisgender populations. We conducted a systematic review to evaluate the effect of gender affirming medical treatments on health outcomes, measured by patient reported outcome measures (PROMs).

**Methods:** A database search was conducted using PubMed, Web of science, Embase and Psych Info in October 2022. Studies published from 2010 onwards were included for review. Two independent researchers individually conducted study selection and critical appraisal using PRISMA guidelines. PROMs measured health outcomes were divided into those that measured mental health, health related quality of life, gender dysphoria, and sexual health.

**Results:** 82 studies were included in the final analysis. 36 studies were prospective cohort studies with the remainder comprising of retrospective cohort or cross sectional studies. 41 studies analysed PROM data following gender affirming surgery, 21 following gender affirming hormone treatment and 19 studies following both. A great variation in PROM tools were utilised between studies with 70 different PROMS included throughout the studies. The most commonly utilised PROMs analysing quality of life were The Short Form-36 and the World Health Organisation QOL form. Overall, health related quality of life and mental health outcomes were significantly improved following gender affirming treatments. Both surgery and hormone treatments resulted in decreased gender dysphoria. Sexual health outcomes were mixed, likely relating to the heterogeneity in PROMs utilised



in the included studies.

**Conclusion:** Gender affirming treatment in the form of hormone treatment and/or surgery is associated with improved patient reported quality of life, gender dysphoria, anxiety, and depression in gender diverse people. Further analysis of included studies in the form of meta-analysis will allow further quantification of treatment benefit. Further research using PROMs designed to detect health outcomes relevant specifically to gender diverse people will be beneficial.

1. Bretherton I, Thrower E, Zwickl S, Wong A, Chetcuti D, Grossmann M, et al. The Health and Well-Being of Transgender Australians: A National Community Survey. *LGBT Health*. 2021;8(1):42-9.

## id #1588

### Are the results of the MSLT-II study relevant for us in New Zealand?

**Eric Kim<sup>1</sup>, Shelley Hubley<sup>1</sup>, Patrick Lyall<sup>1</sup>, Rebecca Ayers<sup>1</sup>, Anne Collins<sup>1</sup>, Will McMillan<sup>1</sup>**

1. *Te Whatu Ora - Southern, Dunedin*

**Background:** Completion lymph node dissection (CLND) used to be a standard of care for melanoma with a positive sentinel lymph node biopsy (SLNBx). There has been an appreciable change in clinical management of SLNBx positive patients since the MSLT-II trial was published in 2017 [1]. Patient and disease factors differ between the MSLT-II cohort and NZ patients. We compare demographic and disease data and patient outcomes to ascertain the relevance of MSLT-II in the NZ setting.

**Methods:** We analysed all positive sentinel nodes for melanoma at Dunedin Hospital between 2007 and 2022. We recorded the baseline characteristics of patients, and the 3-year melanoma-specific survival (MSS) and disease-free survival (DFS) in pre-MSLT and post-MSLT groups. The two groups were defined as having a positive SLN before or after the publication of MSLT-II (June 2017). We compared these local results to the results published in the MSLT-II study.

**Results:** There were 275 SLNBx, of which 55 had a positive SLN and were included in the study (mean age 63.6 years [range 23 – 86], 37 male and 18 female). Local patients had a thicker Breslow thickness (3.53mm [range 0.9 – 13] vs 2.73mm [range 0.34 – 30.0]) and larger SLN metastases compared to the MSLT-II population (3.29mm [IQR 1.83 – 3.7] vs 1.09mm [IQR 0.25 – 1.35]). CLND rate in the pre-MSLT-II group (34 patients) was 85.3%, and in the post-MSLT-II group (21 patients) was 33.3% (p<0.01). Three-year MSS was 73.0% and 75.7% (p=0.97), DFS was 64.3% and 67.2% (p=0.96) in pre-MSLT and post-MSLT groups respectively.

**Conclusion:** Our management of positive SLN has changed since the publication of MSLT-II without affecting the three-year MSS rates locally. The local MSS rate (74%) is lower than the rate reported in MSLT-II (86%) and this may be a reflection on worse prognostic melanomas in NZ.

## id #1625

### Do >5mm margins lead to superior survival outcomes in oral cavity squamous cell carcinoma?

**Sabrina P Koh<sup>1</sup>, Rahul Jayakar<sup>1</sup>, Craig A MacKinnon<sup>1</sup>, Fiona Smithers<sup>1</sup>, Swee T Tan<sup>1,2</sup>**

1. *Wellington Regional Plastic, Maxillofacial & Burns Unit, Wellington, New Zealand*

2. *Gillies McIndoe Research Institute, Wellington, New Zealand*

**Background:** Current literature recognises margins greater than 5mm as clear, in oral cavity squamous cell carcinoma (OCSCC). Margins less than 1mm and involved margins are indications for post-operative radiotherapy. There is a grey area with 'close' margins 1 to 4.9mm. We aim to evaluate survival and recurrence outcomes in those with clear margins, compared to those with involved, narrow <1mm and close 1 to 4.9mm margins. We further aim to explore whether there is a specific margin size within the 1-4.9mm range which significantly impacts survival and recurrence outcomes. We also aim to identify if there are predictive factors for presence of positive margins.

**Methods:** All patients with OCSCC undergoing major head and neck surgery between 2009-2021 at Hutt Hospital have been identified from our Head and Neck Database. Primary outcome measures include overall survival (OS), cancer-specific survival (CSS), and recurrence-free survival (RFS). Univariate analysis will be performed OS, CSS and RFS in those with involved, <1mm and 1-4.9mm margins compared to those with clear >5mm margins. Multivariate analysis will be performed to adjust for confounding factors including patient demographics such as age, comorbidities, ethnicity, smoking status, alcohol intake, immunosuppression, gender and adjuvant post-operative radiotherapy, and tumour features including tumour stage, degree of differentiation, perineural invasion, lymphovascular invasion and metastatic disease. Our secondary aim is to identify whether there is a specific margin cut-off of significance in those with margins between 1 to 4.9mm compared to those with clear margins, and this will be done by comparing those with 1-1.9mm, 2-2.9mm, 3-3.9mm and 4-4.9mm margins to those with >5mm margins, to see whether a narrower margin may be associated with comparable outcomes. We will then evaluate the cohort of patients with positive margins and look at patient features and tumour features which may increase risk of having positive margins.

## id #1579

### Prophylactic InCisional antibiotics in skin surgery: the PICASSo Trial

**Maple Goh<sup>1</sup>, Claire Hollewand<sup>1</sup>, Stephen McBride<sup>1</sup>, Bert van der Werf<sup>2</sup>, Benny Tan<sup>3</sup>, Jon A Mathy<sup>4</sup>**

1. *Middlemore Hospital, Otahuhu, Auckland, New Zealand*

2. *Department of Epidemiology and Biostatistics, University of Auckland School of Population Health, Auckland, New Zealand*

3. *Plastic & Reconstructive Surgery, Te Whatu Ora - Waikato, Hamilton, New Zealand*

4. *Waipapa Taumata Rau – The University of Auckland, Otahuhu, Auckland, New Zealand*

**Background:** Skin cancer is the most common cancer worldwide, with surgery representing the mainstay of treatment. SSIs are a common complication of surgery, and attempts at mitigation include prophylactic antibiotics, either preoperative or postoperatively, administered either intravenously or orally. Scant data exists on the effect of INCISIONAL injection of prophylactic antibiotics at the operative site and its effect on SSI.

**Method:** A randomized, double-blind, controlled, prospective clinical trial was run from the Manchester See & Treat unit over 6 months. Patients were randomized to 3 treatment arms: operative site injection of buffered local anaesthetic alone (control), buffered local anaesthetic + micro-dosed flucloxacillin (500 mcg/cc), or buffered local anaesthetic + micro-dosed clindamycin (500 mcg/cc). Flucloxacillin and clindamycin were selected due to their lack of tissue toxicity and are commonly used prophylactic antibiotics. The concentrations are designed to meet MIC (minimum inhibitory concentration) for skin flora and not dependent on volume injected. The primary endpoint was rate

of postoperative SSI, defined as a standardized Post-Operative Wound Infection (POWI) score > 5 [range, 0-7].

**Results:** A total of 681 patients (over 721 presentations and comprising 1,131 lesions) were analyzed. The rate of SSI was 5.7% in the control arm, 5.3% in the flucloxacillin arm, and 2.1%\* in the clindamycin arm (\*p<0.05, clindamycin vs. control). Significantly fewer lesions in the clindamycin (2.1%, p<0.01) and flucloxacillin (4.0%, p<0.05) arms required postoperative systemic antibiotics compared with the control arm (8.0%). There were no adverse reactions.

**Conclusion:** Our PICASSO trial represents the first study evaluating incisionally injected antibiotics for SSI prophylaxis in general skin cancer surgery, and the first to compare the efficacy of flucloxacillin versus clindamycin. The significant reduction in SSI with micro-dosed incisional clindamycin provides robust evidence to inform treatment guidelines for this extremely common procedure.

## id #1581

### Corneal neurotisation, an eye saving procedure - the New Zealand experience

**Fouad Nahab<sup>1</sup>, Anne-Marie Yardley<sup>2</sup>, Kenneth Chan<sup>2</sup>, Emily Yassaie<sup>1</sup>**

1. *Wellington Regional Plastic, Maxillofacial and Burns Unit, Hutt Hospital, Wellington, New Zealand*

2. *Ophthalmology, Wellington Hospital, Wellington*

**Background:** Corneal neurotisation (CN) is a surgical procedure aimed at restoring corneal sensation by transferring healthy nerves to the anaesthetic cornea. Since its re-emergence (2009), the technique has evolved to either direct (nerve transfer) or indirect (nerve graft) approaches. This revolutionary procedure has been used to treat neurotrophic keratopathy (NK). The safety and efficacy of CN has been demonstrated globally, however the procedure has only recently been adopted in New Zealand. We present the first New Zealand case of CN, and compare our outcomes to the current literature.

**Methods:** A literature review conducted, on Pubmed and Google Scholar; keyword “corneal neurotisation”. Outcomes and overseas experience on CN were collated. Our case of CN is presented and compared to these results.

**Results:** Literature review identified that CN is a safe and effective procedure at reversing NK, whilst improving corneal sensation and restoring visual acuity. Both direct and indirect techniques showed comparable outcomes. Direct CN was associated with faster recovery of corneal sensation. We present a paediatric case with congenital trigeminal nerve hypoplasia, receiving an indirect corneal neurotisation via sural nerve graft. At 6 month follow-up, NK has resolved with subjective corneal sensation developing.

**Conclusion:** Our case of CN has successfully treated NK caused by congenital corneal anaesthesia. As demonstrated by restoration of epithelial integrity; a result reinforced by previous authors. CN is a safe vision saving solution with good outcomes for the treatment of difficult conditions such as NK.

1. Dragnea DC, Krolo I, Koppen C, Faris C, Van den Bogerd B, Ni Dhubhghaill S. Corneal Neurotization—Indications, Surgical Techniques and Outcomes. *J. Clin. Med.* 2023; 12(6):2214.
2. Swanson, MA; Swanson, RD; Kotha, VS; Cai, Y; Clark, R; Jin, A; et al. Corneal Neurotization: A Meta-analysis of Outcomes and Patient Selection Factors. *Ann. Plast. Surg.* 2022; 88(6): 687-694.

## id #1619

### Are our current recommendations for surgical supervision of trainees fit for purpose?

**Nicola Peat<sup>1</sup>, Richard Wong She<sup>1</sup>**

1. *Department of Plastic Surgery, Middlemore Hospital, Auckland, New Zealand*

Are our Trainees receiving the appropriate level of Consultant supervision for surgical procedures during their different stages of SET training?

Current New Zealand Plastic and Reconstructive Surgery Consultants and Trainees were surveyed to assess the appropriate level of consultant supervision during the different stages of SET training. Part 1 asked participants their opinion on the level of supervision provided by consultants to trainees during selected surgical procedures, at three phases of SET training. Part 2 asked whether they agreed with the current PRS Curriculum recommendations for these same procedures.

Key surgical procedures were selected from the current PRS Curriculum for each of the three phases of PRS training: Early (SET 1-2), Mid (SET 3-4), and Late (SET 5). Participants were asked their opinion on recommended supervision levels based on the four categories of supervision: “direct guidance”, “monitoring and supervision”, “minimal or no supervision”, or “safe and competent for most situations”. This was then compared to the current recommendations outlined in the PRS Curriculum.

The survey was sent to all current PRS trainees (SET 1-5) as well as those who had recently completed training in the past two years and all Consultants involved in supervision of trainees in public hospital Plastic and Reconstructive Surgery. Responses were voluntary and anonymous.

Our results share an insight into the expectations and understanding from both trainee and consultant perspectives. This information is important since we continue to follow our traditional approach to surgical training while the Australian Plastic Surgeons have moved to a competency based approach. Our survey results will facilitate evaluation of our current methods as we consider whether we should move towards the Australian model of competency based surgical training.

## id #1552

### Lessons learned from the service line approach to transgender health, and crossover opportunities in Aotearoa

**Benny Tan<sup>1</sup>, Jon Mathy<sup>2</sup>, Devin O'Brien Coon<sup>3</sup>**

1. *Waikato DHB, Hamilton, Waikato, New Zealand*

2. *Plastic Surgery, Middlemore Hospital, Counties Manukau, Auckland*

3. *Plastic Surgery, Brigham and Women's Hospital, Boston, Massachusetts, USA*

**Background:** Gender dysphoria is the emotional distress caused by the incongruity between a person's perception of their birth and gender identity. Stats NZ reports the incidence in Aotearoa identifying as transgender or non-binary was 0.8% in 2020, and 4.2% identified as LGBTQ+.

The “service line” approach reflects a style of centralizing services around a single point of patient contact. This promotes patient-centred navigation across specialties with collaboration maintained through a central hub at all stages of patient care. Several established successful examples in the United States include bariatric, solid organ transplant, and vascular pathways.

**Methods:** Core elements of the service line model - including functional details of the Johns Hopkins Centre for Transgender Health, operating since 2017 – are identified. This model was applied to create a new Centre for Transgender Health at the University of Florida. Guidelines established by the World Professional Association for Transgender Health (WPATH) were followed.

**Results:** An academic, supra-regional Centre for Transgender Health based on the service line model was built at the University of Florida between 2021-2023. 73 patients were seen for gender affirmation surgery. (17 completed surgery: 15 top surgeries, 1 hysterectomy, 1 simple orchiectomy). Multiple specialties were involved including Urology, Gynaecology, Radiology, Breast surgery, endocrinology, social work and psychiatry.

High levels of patient satisfaction were reported. Primary challenges included operative barriers related to restricted funding, and inconsistent public support for transgender care. Other challenges include deviation of mental health documentation from recommended WPATH guidelines.

**Conclusions:** Learnings from both established and newly created multidisciplinary referral centres based on the service-line approach to Transgender Health delivery are described. The infrastructure, resourcing and specialist contributors are discussed. Aotearoa represents a unique health care system and there would be value in stimulating discussion with the group about crossover opportunities with the service line experience presented.

id #1629

## Regional lymph node clearance versus non-operative management for sentinel node positive melanoma in Counties Manukau

**Kristy Toy<sup>1</sup>, Paul Baker<sup>1</sup>**

1. *Te Whatu Ora - Counties Manukau, Papatoetoe, Auckland, New Zealand*

**Background:** Cutaneous malignant melanoma is a skin malignancy with significant morbidity and mortality. Patients with melanoma lesions with a Breslow thickness of greater than 0.8mm may be offered a sentinel node biopsy (SNB), according to the latest guideline recommendations. Patients with positive sentinel nodes on SNB may be offered regional lymph node dissection (RLND). In 2017, a randomized controlled trial (Multicenter Selective Lymphadenectomy Trial MSLT-II) demonstrated no additional benefit of regional lymph node dissection on melanoma-specific survival compared with patients who had undergone surveillance with ultrasound guided imaging. The aim of our audit was to assess the percentage of malignant melanoma patients with a positive sentinel node biopsy undergoing RLND and whether this had reduced following the publication of the MSLT-II study in Counties District Health Board. Our secondary outcomes included, morbidity and mortality and number of images and interventions per patient.

**Methods:** We identified patients with malignant melanoma who underwent a sentinel node biopsy from 2015-2020. Patients who underwent a head or neck biopsy or with distant metastases were excluded. The total recorded eligible patients with positive SNB in the Counties Manukau was 25 (16 before-publication patients, 9 after-publication patients). 12 before-publication patients and 5 after-publication patients had been offered with RLND.

**Results:** There was no significant difference regarding the RLND offer comparing patients before and after the publication (p-value = 0.3942). The detected risk difference is about -19%, with a bootstrapped 95% confidence interval of (-56% – 4%). Though there was a noted reduction in the number of images and complications per patient post MSLT-II, these results were not statically significant.

# Abstracts: Posters

In Alphabetical Order  
(presenting author surname)

id #1618

## Choosing wisely: The advantages of autologous breast reconstruction over breast implants

Jeremy Bishay<sup>1</sup>, Naveen Somia<sup>1</sup>

1. *Plastic and Reconstructive Surgery, Prince of Wales Hospital, Randwick, NSW, Australia*

**Background:** Breast reconstruction following mastectomy plays a crucial role in helping women affected by breast cancer regain a sense of normalcy. Breast implants have been widely used for this purpose, offering a seemingly convenient solution. However, emerging evidence has shed light on the advantages of autologous breast reconstruction, sparking a paradigm shift in the field.

**Methods:** A systematic review was conducted exploring the advantages of autologous breast reconstruction, identifying a total of 12 studies.

**Results:** Autologous reconstruction offers several advantages over breast implants including the ability to achieve a more natural aesthetic outcome that complements normal contours. All studies confirmed higher satisfaction rates among women who chose autologous reconstruction. A study involving 92 women who underwent breast reconstruction between 2006 and 2010 compared autologous reconstruction (n=55) with implants (n=45). It revealed that 90% of women who underwent autologous reconstruction reported satisfaction after 8 years, in contrast to the 82% satisfaction rate for those with breast implants. Autologous reconstruction mitigates potential complications associated with implants, such as BIA-ALCL, implant rupture and capsular contracture. Patients also experience restored sensation, heightened tactile perception, and an improved overall quality of life. Moreover, autologous tissue allows for simultaneous procedures like abdominal contouring, further enhancing satisfaction. Conversely, breast implants have a limited lifespan and require replacement every 10-15 years, potentially necessitating additional surgeries.

**Conclusion:** Autologous breast reconstruction surpasses implant-based approaches by effectively addressing aesthetic, functional, and longevity considerations. The reviewed literature supports the preference for autologous reconstruction over breast implants. By making informed decisions and tailoring treatment options to meet individual needs, we can significantly enhance the outcomes for women undergoing breast reconstruction.

### References:

- Toyserkani N, Jorgensen M, Tabatabaeifar S, Damsgaard T, Sorensen J. Autologous versus implant-based breast reconstruction: A systematic review and meta-analysis of Breast-Q patient-reported outcomes. *J Plast Reconstr Aesthet Surg.* 2020;73(2):278-285

id #1555

## Interdigitating dendritic cell sarcoma – a rare diagnostic challenge

Grace Boyd<sup>1</sup>, Alistair McCombe<sup>1</sup>, Gerard Bayley<sup>1</sup>

1. *Princess Alexandra Hospital, Woolloongabba, QLD, Australia*

**Background:** With less than 140 cases of interdigitating dendritic cell sarcoma (IDCS) in the published literature, any chance to learn from this rare and often lethal malignancy is worthwhile. First described in 1981, IDCS is most often found in nodal tissue but can also be found in extra-nodal sites. The most frequent site of its involvement is cervical lymph nodes. Interdigitating dendritic cells are a subset of antigen-presenting cells that are most commonly found in T-cell areas of secondary lymphoid tissue. Localised and disseminated disease are associated with a 1-year mortality rate of

21.1% and 78.9% respectively. Morphological and immunohistochemical overlap with melanoma, lymphoma, histiocytic lesions, and granulomatous inflammation make IDCS a challenge to diagnose.

**Case Report:** We describe a case of a 52-year-old patient with an eight-month history of a left neck lump. FNA initially suggested a diagnosis of metastatic melanoma. Staging scans confirmed localised disease to her left neck. She underwent a unilateral modified radical neck dissection and superficial parotidectomy, from which histopathological examination revealed a diagnosis of IDCS. She subsequently completed a course of adjuvant radiotherapy. The patient was reviewed at twelve months post-operatively with no clinical or radiological evidence of disease.

**Conclusions:** Our review of the literature following a comprehensive pooled analysis published in 2019 has emphasised the challenges associated with diagnosing and treating IDCS, its extreme rarity, and its high mortality rate. There is strong evidence for surgical excision where possible, however further data is required with respect to treatment protocols and follow-up for these patients. We hope this and other new published cases will contribute to the development of more robust treatment guidelines in the future.

## id #1628

### Scleroderma related calcinosis cutis treated with topical sodium thiosulfate: Photographic case report and literature review.

**James Bozzi<sup>1</sup>, Matthew Dutton<sup>1</sup>**

1. St George Hospital, Kogarah, NSW, Australia

**Background:** Calcinosis cutis(CC) is a rare, often insidious, chronic calcium-deposition disorder of the cutaneous tissues resulting in friability. Dystrophic CC, the most common subtype, occurs in patients with an underlying autoimmune connective-tissue disease, like scleroderma. CC is also reported post burns, wound infection, and trauma. Procedural treatments such as surgical excision, laser and extracorporeal lithotripsy have variable results with frequent recurrence or failure. Few case series providing compelling evidence for topical sodium thiosulfate(TST) as a chelating agent, to increase calcium resorption exist; however, all reported defects were small(<3cm).

**Methods:** A 50-year-old male with left leg linear scleroderma presented with a 2-month history of atraumatic infected left pretibial wound, after failing conservative measures. He underwent surgical debridement, with resultant histological CC diagnosis. Refractory to negative pressure wound therapy and silver-based dressings, it progressed to a 5x8cm full thickness defect. A literature review was completed to ascertain the efficacy of TST. Subsequently, TST was trialled with complete local response (soft-tissue resorption of calcium confirmed on bone scan) and he was then amenable to grafting.

**Results:** 16 publications, reporting 48 patients with CC treated with TST were identified. Mean age was 51 years, 76% were women, the majority involved the limbs and mean duration of treatment was 4 months. 19% had complete, 60% partial and 21% had no response. One patient was allergic. Our patient was the only reported case of CC with a wound greater than 3cms.

**Conclusion:** Topical sodium thiosulfate may represent a safe, effective, and inexpensive non-operative adjuvant, in the management of CC.

1. von Hodenberg C, Neufeld M, Wohlrab J, Meyer D, Ehrchen J, Sunderkötter C. Topical sodium thiosulfate: a reliable treatment for digital calcinosis cutis - a case series with six patients. *JDTschDermatolGes.*2020;18(10):1181-1183.
2. Ma JE, Ernste FC, Davis MDP, Wetter DA. Topical sodium thiosulfate for calcinosis cutis associated with autoimmune connective tissue diseases: the Mayo Clinic experience, 2012-2017. *ClinExpDermatol.*2019;44(5):e189-e192.

## id #1593

### Pre-operative inflammatory markers in upper limb infections

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1. Plastic Surgery Service, Hutt Hospital, Lower Hutt, New Zealand

**Background:** Pre-operative white blood cell (WBC) and C-reactive protein (CRP) frequently contribute to clinical decision making in patients with upper limb infections. Their utility in indicating which patients require surgical debridement is not fully understood. A study by Gauger et al. found that among patients who underwent surgical debridement and had positive intra-operative cultures, CRP and WBC were raised in 90% and 54 % of patients respectively.

**Methods:** Data were collected retrospectively from discharge summaries over a 5 year period (2018 to 2022). Patients were included if they were aged over 18, underwent surgical debridement of an upper limb infection, had positive intra-operative cultures and had pre-operative CRP and WBC measured.

**Results:** One hundred and fifty four patients were included. Male patients and smokers were disproportionately represented within the study population (66.2% and 30.5% respectively). Despite using lower normal laboratory thresholds than the original study, we found lower values for both CRP and WBC (raised in 76.6% and 35.1% of patients respectively). The median number of debridements was 2. The median length of hospital stay was 2 days. The most common site of infection was the lesser fingers. The most common organism on culture was *Staphylococcus aureus*.

**Conclusion:** Pre-operative inflammatory markers are limited in their contribution to clinical decision making in this setting. WBC and CRP may be normal despite patients having infections that require surgical debridement. CRP appears to be more sensitive in than WBC.

1. Gauger EM, Mitchell PM, Halverson SJ, O'Neill DE, Reasoner K, Desai MJ, et al. Acute-Phase Reactants in Operatively Treated Upper Extremity Infections: A Retrospective Review. *HAND.* 2021;16(4):546–50.
- 2.

## id #1557

### Metastatic BCC – A rare outcome in a common malignancy. Case series and literature review

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Basal Cell Carcinoma (BCC) is the most common cancer in Australia, representing 80% of non-melanoma skin cancers. Metastatic BCC is very uncommon (incidence up to 0.0028%) so few clinicians have experience with managing this disease. Methodology: We performed a literature review of metastatic BCC in light of two cases referred to our specialist tertiary cancer centre in 2022. Results: Case 1: 65 year old man with T3 infiltrative BCC of the scalp with perineural invasion (PNI) excised with clear margins 2 years prior. A right level V neck mass was noted on ultrasound with features suggestive of a sebaceous cyst. Excisional biopsy revealed a subcutaneous deposit of metastatic BCC with invasion of a single lymph node. Selective neck dissection was performed with no further metastases in 24 lymph nodes followed by adjuvant radiotherapy. Case 2: 83 year old man on cemiplimab for multiple unresectable cutaneous Squamous Cell Carcinomas (SCC) developed an enlarged PET-avid axillary node, favoured to

be SCC, on fine needle aspiration cytology. After 10 months of immunotherapy, the node failed to respond and repeat biopsy was suggestive of BCC, with an overlying cutaneous lesion noted. Axillary lymphadenectomy found 2/14 nodes involved with metastatic nodular BCC with PNI. The patient continued cemiplimab treatment without complication.

**Conclusion:** Clinicians should maintain an index of suspicion for the occurrence of metastatic BCC, particularly when the working diagnosis is not concordant with clinical and radiological findings. The role for nodal clearance, adjuvant radiotherapy, and hedgehog pathway inhibitors in this setting warrants further study.

## id #1560

### Novel application of biodegradable temporising matrix for perineal reconstruction of extra-mammary paget's disease

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Extramammary Paget's disease (EMPD) is a rare intraepithelial adenocarcinoma, predominantly affecting the apocrine gland-bearing skin of the genital, perineal, and perianal regions. This typically presents as a slow-growing, poorly defined, erythematous and eczematous rash, difficult to distinguish from other benign pathologies. Wide surgical excision (2-3cm margins) remains the standard of care however, achieving negative margins can prove difficult, often resulting in extensive surgical defects requiring complex reconstruction. Penoscrotal EMPD defects represent a challenge of functional and aesthetic considerations, in a region with high contamination risk.

Given the issues with previously described EMPD defect reconstructive methods, an ideal novel reconstructive method would be robust, adaptable, cosmetically appropriate, and have minimal morbidity.

**Results & Methodology:** We present a case of the novel application of NovoSorb® Biodegradable Temporising Matrix (BTM) for the reconstruction of a large EMPD defect. Reconstruction was achieved in two-stages. Application of the BTM synthetic dermal substitute was followed in a second stage by autologous split skin grafting.

**Conclusion:** BTM application in this case provided a simple yet aesthetically and functionally successful method of reconstruction following resection of a large penoscrotal and perineal EMPD lesion where alternative reconstructive methods may have been unsuccessful. BTM should be considered for use in perineal reconstruction following cancer resection.

1. Concannon E, Coghlan P, DamKat Thomas L, Solanki NS, Greenwood JE. Biodegradable Temporizing Matrix Reconstruction of Complex Perineal Burn Wound: A Case Report. *J Burn Care Res.* 2021 Sep 30;42(5):1038-1042.

## id #1561

### Perineal defect reconstruction following pelvic exenteration and abdominoperineal resection: Proposed patient information sheet

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Evidence based patient information is an integral part of patient education which is aimed at promoting health and patients' participation in choosing treatment for their health conditions. There are materials currently available for patients undergoing pelvic exenteration/ abdominoperineal resection, however there is limited material available on reconstruction to supplement their journey in choosing treatment. We have drafted an information sheet on reconstructive options post pelvic exenteration to supplement and reinforce information provided to patients during the discussions.

## id #1589

### Persistent non-nasal velopharyngeal incompetence secondary to cicatrix: Evaluation and management of a rare tonsillectomy complication

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Transient velopharyngeal incompetence (VPI) is a known complication of tonsillectomy, estimated to occur in 2.2% of cases(1). It is primarily characterised by nasal air escape, hyper nasality, and in some cases associated nasal regurgitation. It is most commonly transient resolving around 5 months post operatively(1).

This case report describes the unique case of a 15-year-old female who developed persistent Non-Nasal VPI following uncomplicated elective tonsillectomy. The patient presented with nasal regurgitation of liquids at three weeks post operatively, without accompanying hyper nasality of voice or nasal air emission. Regurgitation persisted until the time of surgical intervention at seven months. This is a clinical scenario not previously reported in the literature.

Evaluation and workup was conducted via cleft clinic MDT with history, assessment of speech, direct visual examination and nasendoscopy utilised for the diagnosis. Cicatrization of the palatoglossal arches was identified as the underlying pathology, with bilateral cicatricial contraction resulting in tethering of the tongue base to the soft palate. The postulated pathoanatomical explanation for the persistent nasal regurgitation is the shortened palatoglossus muscle impairing closure of the velopharynx as the tongue base descends during swallowing. Surgical intervention was planned to involved the release of scarred mucosa from the palatoglossus muscle, with recruitment of transverse mucosal laxity in the pharynx to lengthen the arches. The postoperative course was uncomplicated, with the patient reporting immediate resolution of nasal regurgitation.

This case report includes a literature review, detailed description of the diagnostic workup, postulated pathoanatomy, operative intervention, and outcome gained for the evaluation and management of a unique case of non-nasal VPI secondary to cicatricial contraction of the palatoglossal arches post

tonsillectomy.

1. Khami M, Tan S, Glicksman JT, Husein M. Incidence and Risk Factors of Velopharyngeal Insufficiency Postadenotonsillectomy. *Otolaryngol Head Neck Surg.* 2015 Dec;153(6):1051-5. doi: 10.1177/0194599815596494. Epub 2015 Jul 24. PMID: 26209078.

## id #1553

### Injectable Polyacrylamide Hydrogel breast augmentation – a challenging mastectomy and reconstruction

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**Background:** Injectable Polyacrylamide Hydrogel (PAAG) is a jelly-like biomaterial developed for use in percutaneous non-surgical cosmetic procedures in the 1980s. It was widely used as a percutaneous filler for facial and breast aesthetic procedures however safety concerns relating to infection, allergic reaction, tissue degeneration/breakdown, cosmetic asymmetry and hardening, and pain have led to PAAG being prohibited from use in most countries. Despite this, many patients globally are living with late complications following PAAG injection and present reconstructive and aesthetic challenges to the Plastic Surgeon.

**Aims & Objectives:** We report the case of a 52-year-old indigenous woman who presented to our service for risk reducing prophylactic mastectomy and immediate reconstruction. She had a strong family history of breast cancer and genetic testing revealed a PALB-2 oncogene mutation. The patient had undergone “Amazing Gel” PAAG breast augmentation performed 15 years prior in China with no prior reported complications.

**Results:** Bilateral skin sparing mastectomy was performed via inframammary incision. PAAG was noted within breast, dermis, pectoralis tissues, making identification of an appropriate mastectomy plane very difficult. Mastectomy weights of 256g and 153g were obtained. It was not possible to remove all PAAG. Immediate reconstruction was performed with pre-pectoral smooth round implants and total wrapping with Acellular Dermal Matrix. Delayed wound healing and matrix integration was noted on the Right breast, requiring return to theatre at 3 weeks postoperatively for debridement and washout. Ultimately an excellent cosmetic result was achieved once healed.

**Discussion & Conclusion:** We report a challenging reconstructive case for a patient requiring bilateral mastectomy following PAAG breast augmentation. The authors believe that many patients will require mastectomy with a prior history of PAAG augmentation over the next decade with an associated increased risk of perioperative wound healing and infective complications.

## id #1566

### Biodegradable Temporising Matrix (BTM) for complex cancer reconstruction – The Peter MacCallum Cancer Centre cohort

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**Background:** Non-graftable and composite wound defects present major challenges to the

reconstructive surgeon. Many defects require complex local flap or free microvascular tissue transfer (free flap) approaches. Synthetic skin substitutes including Biodegradable Temporising Matrix (BTM) have revolutionised the management of these complex defects with low-morbidity and low-complexity surgery. However, limited data exist for their use in cancer reconstruction in Australia.

**Methods:** A retrospective review was performed of all patients undergoing cancer resection and BTM reconstruction between February 2021 and August 2022 in our institution. Outcomes included BTM integration, postoperative infection, and return(s) to theatre.

**Results:** Twelve patients were treated for primary or secondary defects following cancer resection during this period. Eight patients were male, four female, mean age at surgery was 68 years. Surgical defects included squamous cell carcinoma (SCC) and melanoma of the scalp, face, lower limb, and SCC-related osteoradionecrosis (ORN) of the scalp. T-stage of primary tumours ranged from T2 to T4. There was one case of in-transit melanoma metastasis. Four patients were treated with post-operative radiotherapy. Overall BTM integration was 83% (10/12), with a 50% integration rate (2/4) observed in the post-radiotherapy group. Failed integration required return to theatre for alternative reconstructive approaches.

**Conclusion:** We report our experience with BTM reconstruction for complex cancer-related tissue defects in 12 patients, the largest cohort of this type in the Australian literature. BTM represents an exciting reconstructive tool for the cancer reconstructive surgeon, with a high rate of successful integration and low morbidity.

## id #1567

### Exploring cutaneous malignancy reconstruction: A case series and literature review of an innovative approach

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**Background:** Cutaneous malignancy reconstruction can vary in complexity, from direct closure to free flap reconstruction. Biodegradable Dermal Matrix (BTM) reconstruction of defects from trauma and necrotising fasciitis is well described in literature. Outcomes following reconstruction of cutaneous malignancy defects are not well known.

**Methods:** We report two interesting cases of cutaneous malignancy reconstruction referred to our specialist tertiary cancer centre in 2022. A review of the recent literature was performed.

**Case 1:** A 73-year-old female presented with a large, radially expanding and focally ulcerated, infiltrating, sclerosing and nodular basal cell carcinoma (BCC) extending over the patient's forehead, left upper eyelid, nasal bridge, and right medial canthus. Wide local excision (WLE) was initially performed as a DRAPE procedure (delayed reconstruction after pathological examination). Further resection was performed with BTM reconstruction, later followed by delamination and skin grafting. At 8 weeks post reconstruction, good functional and cosmetic outcomes were achieved.

**Case 2:** An 84-year-old female presented with a large Marjolin ulcer (squamous cell carcinoma) affecting the tissues over her right tibia and Achilles tendon. WLE to periosteum and tendon left a non-graftable defect, so reconstruction was performed with BTM. An extended period of BTM integration was required; delamination and split skin graft reconstruction occurred at approximately 8 weeks post operatively. At 8 weeks post reconstruction, good cosmetic and functional outcomes were achieved.

**Conclusion:** BTM offers a viable alternative for patients who would otherwise require more complex

reconstruction via free flap reconstruction, providing a cosmetically and functionally acceptable outcomes.

**id #1568**

## **Establishing a clinical management protocol for osteoradionecrosis of the calvarium**

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**Background:** Osteoradionecrosis (ORN) of the calvarium poses a significant management problem that currently lacks a consensus treatment approach. Current best care is provided on a case-by-case basis.

**Methods:** We sought to determine a management protocol via a retrospective analysis of 37 patients at Australia's only cancer specific public hospital. A total of 1692 patients underwent scalp radiotherapy at our specialist tertiary cancer centre between the period of Jan 2004 and December 2021, 37 of whom suffered from ORN. Statistical analysis was performed using R.

**Results:** Fourteen patients were treated conservatively, nineteen treated with surgical intervention. A further three patients declined surgery and one patient was planned for surgery but deceased pre-operatively. On univariate and multivariate analysis, no statistically significant difference was found for age, gender, or ASA grade between conservative and surgical patients. Free flap reconstruction occurred in 10 cases (27%) and scalp transposition flap in 9 cases (24%). Cranioplasty and skull bone burring occurred in 10 patients and 8 patients respectively. Three grades of Calvarium ORN were determined. 18 patients had grade 1 ORN, 9 had grade 2 and 10 patients had grade 3 ORN.

**Conclusions:** Our proposed treatment algorithm is such that grade 1 ORN is often successfully treated with dressings and antibiotics after surgical debridement of the necrotic tissue. Grade 2 ORN may be treated conservatively in circumstances where anaesthetic risk is too great; if suitable, resection and reconstruction is encouraged. Grade 3 lesions should be offered surgical resection with combined neurosurgical and plastic surgical involvement, i.e., craniotomy, cranioplasty and soft tissue reconstruction. Progression across grades from 1 to 3 may occur rapidly, so close follow up is recommended.

**id #1633**

## **Complex nasal reconstruction: alternatives to forehead flap**

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**Background:** Ala nasi defects can be difficult to reconstruct due to visibility, unique contour, required support and functionality. While small alar defects are often reconstructed with full thickness skin graft or chondrocutaneous grafts, larger ones often necessitate staged forehead flap. First described by Sushruta in 600 BC, it continues to be used to current day but can be bulky, multi staged and prone to donor site morbidity. A novel alternative can be use of local island inversion flap combined with glabellar, bilobed or other local flaps

**Method:** Case series of different combination of local flaps used for complex nasal reconstruction is presented without needing graft or forehead flap with good cosmetic and functional outcomes.

**Conclusion:** For large, complex nasal reconstruction use of combination of local flaps can be used successfully to reconstruct the defect. Combining island inversion flap with other local flaps can provide good cosmetic and functional outcomes as demonstrated in these case studies without the morbidities and limitations of forehead flap and can be considered as an alternative to the often used flap.

1. Tregassia A et al. Use of the nasal sidewall island inversion flap for single-stage ala nasi reconstruction: a report of 103 consecutive cases. *Plast Reconstr Surg.* 2014 Feb;133(2):377-385.

**id #1554**

## **Digit preserving surgery in acral lentiginous melanoma of the hand – Can we avoid amputation?**

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**Background:** Acral Lentiginous Melanoma (ALM) occurs in nailbeds and glabrous skin of the hands and feet. While uncommon (2-3% of melanoma) ALM is often advanced at diagnosis and demonstrates lower response rates to adjuvant therapies. Amputation of ALM affected digits is current recommended management but results in significant functional impairment. Emerging evidence supports wide local excision (WLE) with digit preserving surgery (DPS) in the hand.

**Methods:** A retrospective review was performed of all patients treated with DPS at our institution in 2022. Outcomes included excision margins, wound healing time, functional recovery at 3 months and recurrence at 6 months.

**Results:** Five patients had DPS (3 female, mean age 60yrs). Breslow thickness ranged from in-situ to 1.3mm. Sentinel lymph node biopsy was performed in 2 patients, both negative. 10mm margins for invasive and 5mm for in-situ ALM were taken. Deep margin control included removal of partial thickness distal phalanx in two cases. Reconstruction with full thickness skin grafts had a 100% take rate (5/5). Tip hypersensitivity occurred initially, but responded well to hand therapy. One patient had stiffness at 3 months related to other comorbidities, the rest had full range of motion by 3 months. There was no evidence of locoregional recurrence at 6 months.

**Conclusion:** DPS for ALM of the hand provides adequate surgical margins, excellent functional outcomes, and no evidence of locoregional recurrence in early follow-up. Digit preservation should be considered as part of the management options for in-situ and thin melanomas of functionally important digits affected by ALM. Further study with a prospective clinical trial is planned.



id #1587

## History of transgender surgery

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The history of transgender surgery is a complex and varied one, with many different procedures and techniques having been used over the years. The first documented transgender surgery was performed in 1931 by German physician Magnus Hirschfeld, who oversaw the removal of the testicles of a transgender man named Dora Richter.

However, it wasn't until the mid-20th century that more advanced surgical techniques began to emerge. In 1952, New Zealand physician Harold Gillies performed a phalloplasty on a transgender man, using tissue from the patient's arm to create a penis. This was followed in 1959 by a vaginoplasty performed by Danish physician Christian Hamburger, who used skin grafts from the patient's thigh to create a vaginal canal.

Throughout the 1960s and 1970s, transgender surgery continued to evolve and expand, with doctors experimenting with a variety of techniques for both male-to-female and female-to-male transitions. In 1966, American surgeon Stanley Biber began performing gender confirmation surgeries in his small clinic in Trinidad, Colorado, becoming one of the most well-known and respected practitioners in the field.

In the decades since, transgender surgery has become increasingly sophisticated and refined, with new techniques and technologies allowing for more natural-looking and functional outcomes. However, the field remains controversial, with some critics arguing that such surgeries are unnecessary and potentially harmful to patients. Despite these debates, transgender surgery continues to be an important and growing field, providing vital support and relief for individuals struggling with gender dysphoria and related issues.

id #1577

## A comprehensive review of vaginoplasty: Tracing the historical evolution of surgical techniques

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**Introduction:** Vaginoplasty is a complex surgical procedure that involves the construction or reconstruction of the vaginal canal and surrounding structures. The author's aims are to provide a comprehensive overview of the historical evolution of vaginoplasty techniques, highlighting key milestones and advancements in the field.

**Methods:** A systematic literature review was conducted, utilising various databases and resources, to identify relevant scientific articles, historical records, and medical texts detailing the evolution of vaginoplasty. The search included publications from the inception of vaginoplasty to the present day, covering a period spanning over several centuries.

### Results:

1. **Ancient Origins:** The history of vaginoplasty can be traced back to ancient civilisations, where early forms of gender affirmation surgery were performed. Ancient Indian, Egyptian, and Greek texts contain references to procedures resembling vaginoplasty, highlighting the existence of early surgical interventions for gender reassignment.
2. **19th and Early 20th Century:** During the 19th century, pioneering surgeons began exploring more refined techniques for vaginoplasty. Procedures such as colpocleisis and the McIndoe technique emerged, marking significant advancements in surgical approaches and postoperative outcomes. However, these techniques were primarily focused on creating a functional vaginal canal rather than achieving optimal aesthetic results.
3. **Mid-20th Century:** The mid-20th century witnessed a shift in vaginoplasty techniques with the advent of plastic surgery principles. Innovations in grafting, tissue mobilisation, and the development of new flap-based procedures, such as the penile inversion technique, significantly improved both functional and aesthetic outcomes. Surgeons like Harold Gillies, Georges Burou, and Stanley Biber made noteworthy contributions during this period.

**Conclusion:** Vaginoplasty has evolved significantly throughout history, driven by the pursuit of improved functional and aesthetic outcomes. Understanding the historical context and evolution of these procedures is crucial for contemporary plastic surgeons, enabling them to provide optimal care and contribute to further advancements in the field.

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## The historical development of phalloplasty

### Jake Hindmarch<sup>1</sup>

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**Introduction:** Phalloplasty, a surgical procedure aimed at constructing a penis in individuals born without or with a severely underdeveloped penis, has undergone significant historical development. This presentation delves into the key pioneers and milestones that have shaped the current state of phalloplasty, exploring its rich history and advancements.

**Early Attempts at Phalloplasty:** The roots of phalloplasty trace back to the late 1800s when Jacques Joseph, a German surgeon, performed the first documented procedure. Joseph utilised a flap of forearm skin to construct a penis; however, complications such as high infection rates and tissue rejection limited its success.

**Advancements in the 20th Century:** Throughout the 20th century, surgeons endeavoured to refine phalloplasty through innovative techniques and materials. Vladimir Loss introduced rib cartilage to provide structural support for the reconstructed penis, while Harold Gillies pioneered the use of a pedicled groin flap for urethral reconstruction.

**The Radial Forearm Flap Technique:** In the 1970s, John Monstrey and his team in Belgium revolutionised phalloplasty by developing the radial forearm flap technique. This method, widely practised today, involves harvesting a segment of skin, fat, and blood vessels from the forearm to create a penis. The radial forearm flap technique offers advantages such as a reliable blood supply, excellent aesthetic outcomes, and the ability to fashion a functional urethra.

**Recent Developments and Innovations:** Since its inception, the radial forearm flap technique has undergone advancements. Surgeons have refined the procedure by utilising free flaps and incorporating scrotal implants to enhance aesthetic results. The advent of microsurgical techniques has enabled complex phalloplasty procedures with higher success rates, pushing the boundaries of what can be achieved.

**Conclusion:** From early attempts fraught with complications to the introduction of the radial forearm flap technique, significant progress has been made. Today, phalloplasty remains a critical option for individuals seeking gender-affirming surgery.

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## Ear splinting using duoDERM: A novel technique for correcting neonatal ear deformities

### Rupert W Hobson<sup>1</sup>

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**Background:** Ear deformities in neonatal patients can have a significant impact on auricular appearance later in life, occasionally requiring surgical intervention. Ear splinting has emerged as a non-invasive and effective method to correct these deformities and minimize the need for future surgical procedures. However, the existing techniques and devices available on the market can be costly or cause anxiety among parents, such as the use of pediatric feeding tubes with inserted wires.

**Methods:** In our nurse-led service at Christchurch, we have adopted a technique using duoDERM, as described by Manjit et al.<sup>1</sup>, for the treatment of neonatal ear deformities. duoDERM, a moldable and customizable material, offers an inexpensive and easily teachable approach to ear splinting. The process involves rolling duoDERM into a tube, shaping the ear as desired, and securing it in place using a combination of steri strips and simple tape. We have established a standard follow-up protocol at weeks 1, 2, 5, and 6, providing the option for both in-person and virtual reviews. Regular photo documentation is employed to track the progress of each patient.

**Results:** Referrals primarily originate from neonatal hearing screening programs, with additional referrals received from general practitioners and maternity wards. Our primary goal is to initiate treatment as early as possible, ideally within the first week of life. We will present a series of case studies featuring pre-, during-, and post-molding images of three patients who have undergone this technique.

**Conclusions:** By employing the duoDERM technique for ear splinting, we aim to provide a cost-effective, customizable, and easily teachable approach that minimizes parental anxiety while achieving desirable outcomes for neonatal ear deformities.

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## Surgical management of hidradenitis suppurativa: a case study

### Emily Horan<sup>1</sup>, Alexandra Mortimore<sup>1</sup>, Lachlan Stephens<sup>1</sup>, Brandon Leggett<sup>1</sup>

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**Background:** Hidradenitis Suppurativa (HS) is a chronic, inflammatory skin follicular disease that often manifests after puberty with painful deep-seated nodules, and tract forming abscesses in apocrine gland-bearing areas of the body. The sites commonly involved include axillary, inguinal and anogenital regions. HS has a dramatic decrease in quality of life in sufferers due to emotional, physical, and psychological consequences.<sup>(1)</sup>

Current treatment modalities for HS include lifestyle changes, topical agents (e.g. topical antibiotics), systemic agents (e.g. immunomodulating drugs), laser therapy, and surgery. Surgical management of HS ranges from excision direct closure or skin grafting, to deroofting and allowing to heal by secondary intention.<sup>(1-3)</sup>

**Case presentation:** A 34-year-old male with hurley stage II HS underwent a wide local excision (WLE) and split thickness skin graft (STSG) to his left axilla in 2013, then deroofting and healing by secondary intention to his right axilla in 2021. He provided detailed insight into pain score, analgesia requirement, post operative wound care, complications, range of motion, healing time, and time to return to work. Overall, he preferred deroofting due to reduced post-operative pain score from 1-week, self-managed wound care, faster return to full range of motion and return to work, and overall faster self-reported healing time.

**Conclusion:** This case study demonstrates a unique situation whereby the patient was able to provide insight into the patient experience of two surgical treatment methods for HS in his bilateral axillae. Further comprehensive studies comparing surgical treatment for HS is required to inform standard of care guidelines.

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## id #1574

### Thumb salvage surgery for dermatofibrosarcoma protuberans: A case report and review of the literature

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**Background:** Dermatofibrosarcoma protuberans (DFSP) is a rare mesenchymal tumour that can involve dermis, fat, muscle and fascia. Tumours are slow growing, presenting as a painless, rubbery plaques. The majority occur on the trunk, limbs, and head and neck respectively. It is an intermediate-grade malignancy with a low likelihood of metastasis but high rate of local recurrence. Surgical options include wide local excision (WLE), and Mohs micrographic surgery (MMS).

**Case:** A 69-year-old male presented with a right dorsal thumb mass overlying his first MCPJ. Ultrasound demonstrated increased vascularity. MRI demonstrated a solid enhancing mass. Biopsy confirmed DFSP. He underwent excision with 1cm margin over his right thumb and reconstructed using a pedicled reverse radial forearm flap. Histology demonstrated DFSP, no sarcomatous change, close but clear margins. At his three-months he had a mature flap, and functional thumb. Oncological surveillance was 6 monthly review.

**Discussion:** Literature recommends MMS or WLE for DFSP with margins ranging from 1-5cm.

Given the lack of access to MMS publicly in Australia WLE is the standard of care. There is an argument to limit resection margins to 1cm as an alternative to 2-5cm in selected patients, anatomical locations, and low grade tumours. High grade features include fibrosarcomatous (FS) changes. FS changes mimic high-grade sarcomas, whereas DFSP without FS are generally locally aggressive with low-to-no metastatic potential. This report demonstrates an interesting and rare case of DFSP and thumb salvage surgery that weighs the balance between oncological control, preservation of healthy tissue and functional morbidity.

## id #1602

### Gracillis interposition flap for colo-urinary fistula reconstruction post radical prostatectomy: Case series review of literature

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**Introduction:** Urinary fistulas are uncommon but debilitating complications post prostatectomy, presenting with pneumaturia, fecaluria and urochezia and occurring in 0.6 to 9 % of cases(1). "Conservative" management involves urinary and fecal diversion, although resolution rates are low-one study demonstrating a closure rate of 33% with catheterization and colostomy alone (2); surgical repair is thus often mandated in cases of failure. Various approaches are described- transperineal, transrectal, transsphincteric, and transanorectal. Common techniques for repair post fistula excision include direct layered closure, mucosal flaps, buccal mucosal grafts and interposition with pedicled locoregional tissue: including gracillis, omentum, rectus abdominus, dartos or levator. We describe 2 cases of pedicled gracillis interposition for post prostatectomy urinary fistula reconstruction.

**Discussion and Review of literature:** Outcomes of this technique have been reported in several series. Munoz-Duyos et al reported 9 cases in post-prostatectomy rectourethral fistula with successful healing in all patients with 54 months median follow up (3). Bislengi et al. reported on 52 patients with acquired rectourethral fistulas, Gracillis interposition in this cohort approached 90% closure rates (4). A systematic review of rectourethral fistula repair techniques reported that most high volume centres (>25 patients) use tissue interposition flaps (5).

**Conclusions:** Gracillis interposition flap is a well described, safe and reliable method for post-prostatectomy urinary fistula reconstruction, providing well vascularized locoregional musculature with minimal donor site morbidity.

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2. 2. Thomas C, Jones J, Jäger W, Hampel C, Thüroff JW, Gillitzer R. Incidence, clinical symptoms and management of rectourethral fistulas after radical prostatectomy. *Journal of Urology*. 2010;183(2):608-612.
3. 3. Muñoz-Duyos A, Navarro-Luna A, Pardo-Aranda F, Caballero JM, Borrat P, Maristany C, Pando JA, Veloso E. Gracilis Muscle Interposition for Rectourethral Fistula After Laparoscopic Prostatectomy: A Prospective Evaluation and Long-term Follow-up. *Dis Colon Rectum*. 2017 Apr;60(4):393-398.
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id #1603

## “Z-Abdoplasty”: A modified stoma-preserving approach for recontouring of the colostomized abdominal wall

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**Introduction:** Permanent colostomy is necessitated in a variety of traumatic, inflammatory, neurologic and neoplastic pathologies. Although a large proportion of patients have high function and quality of life (1), a subset experience recurrent difficulties with scars, excess skin folds, hernias and leakage, resulting in significant psychosocial morbidity, often going underrecognized and undermanaged. Abdominoplasty in the colostomized abdominal wall represents a clinical solution to the above problems, addressing a distinct set of concerns compared to the standard abdominoplasty patient.

**Case A:** 53yo woman presented with several years of progressive abdominal discomfort, garment maintenance/leakage issues and skin irritation after previous permanent colostomy and total colectomy for Crohn's disease. Modified vertical “Z-Abdoplasty” was performed- the contralateral limb to the stoma being designed as a standard Fleur-de-lys abdominoplasty configuration, the ipsilateral limb designed as a ‘reverse’ abdominoplasty with upper quadrant/submammary suture line to maximize distance and avoid stomal disruption or postoperative leakage. Rectus plication was performed in standard fashion.

At 6 weeks, there was significantly improved abdominal contour, with nil further garment leakage events and high patient satisfaction.

**Discussion and Review of Literature:** Recontouring techniques of colostomized abdominal walls are reported sparsely in the literature, 3 case series were identified

**Conclusions:** The “Z-abdoplasty” is a viable technique in the colostomized abdomen wall with a favourable scar configuration, allowing access for concurrent rectus plication and incisional hernia repairs in scenarios where concurrent stoma revision is not required and thus preservation is a priority. The psychosocial morbidity inflicted by a misbehaving colostomized abdominal wall can be severe and underrecognized; successful corrective surgery has a high potential for profound improvement.

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id #1607

## Microsurgical Intraoperative Capillary Outflow System (MICOS): A novel but accessible approach to microsurgical drainage

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**Introduction:** Visibility and field drainage are crucial to microvascular performance and efficiency. Traditionally this can be achieved with an assistant manual suctioning by an assistant or a gauze placed under the field, however these may not always be available or adequate. We describe a

simple but novel approach to microsurgical drainage, utilizing simple capillary-action rather than suction by way of common implements present on any theatre/microvascular tray: Microsurgical Intraoperative Capillary Outflow System (MICOS).

**Methods:** A laboratory experiment was conducted based on intraoperative measurements of fluid rates by connecting an infusion of normal saline into a 5x5x5cm cubic container, with moist packs and raytecs draining the container to recreate the capillary-action drainage system. Alligator clips were secured into the well with tips at a pre-set height where the anastomosis was observed to have gone underwater in the operative model- these clips was connected to an electric circuit and a light, which turned on to indicate when the threshold volume was met. This was run over several infusion rates over 30mins, both with continuous infusions and staggered boluses, measuring outcomes of residual volume in container, volume drained and time until line reached.

**Results:** The underwater rate was defined as 5mm as based on the operative model. With continuous rates of 30ml/hr, 40ml/hr the threshold was not reached; at 70ml/hr the threshold was met at 15mins. With 5-minutely bolus rates of 2.5ml (30ml/hr), the threshold was not met; with 5-minutely bolus rates of 3.33ml (40ml/hr) and 4.2ml (50ml/hr) the threshold was met at 21 and 16mins respectively.

**Discussion and conclusions:** Compared to the intraoperative measurement of heparinized 32ml per hour, the MICOS comfortably drains equivalent rates. This system represents a simple but accessible microsurgical adjunct, tolerating flow rates present in most clinical scenarios, as validated through our laboratory model.

id #1621

## 25-years of major head and neck surgery at the Wellington Regional Head and Neck Unit

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**Background:** The head and neck service at the Wellington Regional Plastics, Maxillofacial and Burns Unit at Hutt hospital, services central New Zealand with a catchment area of 1.2 million. The Head and Neck Database includes all patients undergoing major head and neck surgery. Data collected includes patient demographics, operations performed, tumour features and long-term survival data. We reviewed 25 years of data to provide insight into cases performed and trends, to plan future resource allocation.

**Methods:** All patients on our Head and Neck Database between 1996 and 2021 were included. Patient demographics, gender, ethnicity, socio-economic status, source and reasons for referrals, and ablative and reconstructive procedures, were analysed.

**Results:** A total of 1,747 patients with a median age of 68 years, underwent 2,004 operations, including 2,021 ablative and 1,062 reconstructive procedures. 66% of patients were male, 89% were NZ Europeans, and 50% of patients came from the most socio-economically deprived regions. 91% of referrals were head and neck cancer, with head and neck cutaneous squamous cell carcinoma (HNCSCC) and oral cavity squamous cell carcinoma (OCSCC) comprising 34% and 29% of head and neck cancer referrals, respectively. The annual number of operations performed increased from 5 to 106, and the number of free flap reconstructions, performed increased from 1 to 31 cases over this period.

**Conclusion:** The majority of patients managed had head and neck cancer, mostly HNCSCC and OCSCC with increasing number of cases requiring free flap reconstruction. Based on the current

trajectory, the number of major head and neck cases performed annually is likely to continue increasing. Most of the patients are from the most socioeconomically deprived regions of central New Zealand. These are important considerations when considering access to treatment, and planning future resource allocation for our service.

## id #1623

### Prevalence and predictive factors for occult nodal disease in oral cavity squamous cell carcinoma

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**Background:** Occult nodal disease occurs in up to 30% of patients with oral cavity squamous cell carcinoma (OCSCC). This study aimed to identify the prevalence and the predictive factors of occult nodal disease in OCSCC patients with a clinically negative (N0) neck.

**Methods:** All patients with OCSCC with a clinically N0 neck, undergoing elective neck dissection, between 2009 to 2021 at Hutt Hospital were identified from our Head and Neck Database. Patients with occult metastasis were identified and univariate analysis was performed to identify risk factors of occult metastasis including patient demographics and tumour characteristics.

**Results:** Of 173 patients identified, 40 (23.1%) had occult nodal disease. Increased pathological stage of the primary tumour (pT stage) was associated with an increased risk of occult neck metastasis, nearing statistical significance (OR 1.31, 95% CI 0.98-1.75, p=0.071). Perineural invasion (PNI) was associated with an increased risk of occult metastasis although this was not statistically significant (OR 1.77, 95% CI 0.83-3.8, p=0.142). Patient demographics including gender, smoking status, alcohol use, deprivation score and comorbidities were not statistically significant risk factors for occult nodal disease.

**Conclusion:** 23.1% of patients undergoing an elective neck dissection for OCSCC had occult metastatic neck disease. Increased pT stage was associated with an increased risk of occult nodal disease. Presence of PNI, may be a predictive factor for occult nodal disease, however this was not statistically significant. No patient demographic feature was an independent risk factor for occult nodal metastasis. Larger cohort studies are warranted to further explore prognostic factors for occult nodal disease in OCSCC.

## id #1599

### The utility of supraclavicular flaps: An update through the experience of a regional institution

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The supraclavicular artery island flap (SCAF) has been widely described in the reconstruction of head and neck defects with the return of popularity following the description of its vascular supply by Pallua et al<sup>1</sup>. Benefits include the well described anatomy, good colour/texture match, ease of harvest and minimal donor site morbidity<sup>1</sup>. Our series supports the utilities for the SCAF in a regional

centre as well as new indications which have not been previously described.

A single surgeon case series from a regional institution from 2020 to 2022 in which supraclavicular flaps have been used in head and neck reconstruction. Cases were selected if the SCAF was available, able to reconstruct the skin defect and the donor site was deemed to be able to be closed directly.

Patients were aged 80 years or older. Indications included cancers for primary disease, recurrent disease and irradiated fields. The flap was used for volume and contour correction and in the setting of symmetry surgery for facial palsy. All flaps were islanded, donor sites closed directly and the inset flap went on to heal with no flap loss. The pedicle resulted in a cord or tented appearance and donor site was thin over the clavicle and the scars appeared stretched.

For the elderly and comorbid cohort of head and neck patients, the SCAF offered a reliable and technically simpler alternative to free flap reconstruction with comparable outcomes, shorter operative time, less ICU stay, and less demanding postoperative monitoring.

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2. Kokot N, Mazhar K et al. The supraclavicular artery island flap in head and neck reconstruction: applications and limitations. *JAMA Otolaryngol Head Neck Surg* 2012

## id #1580

### Rugby facial fractures in New Zealand – the price of our national sport

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**Background:** Rugby's characteristic high impact gameplay puts players at risk of injury, with the sport generating the highest number of Accident Compensation Corporation (ACC) injury insurance claims compared to any other team sport in NZ(1). Recent medical and media attention has focussed on head injuries and sparked several rule changes to protect players from serious injury. The aim of this study was to characterise the epidemiology of facial fractures sustained while playing rugby and to evaluate the associated cost of this nation's beloved sport.

**Methods:** A retrospective review of ACC facial fracture claims from 2012-2022 was performed. Information about player demographics, injury details and cost of treatment was anonymously collected.

**Results:** A total of 6890 claims covered 7710 rugby facial fractures during the review period, accounting for 9% of all facial fracture claims in NZ. Fractures occurred most in men (94%) and in the 15-19 years age group (34%). Nasal bone fractures were most common and accounted for 65% of fractures. Approximately 1 in 5 fractures required operative intervention (21%). Over the ten-year period the total ACC expenditure for rugby-related facial fractures was 12.8 million dollars.

**Conclusion:** This study confirms rugby's significant contribution to facial trauma in NZ. The burden of rugby-related facial trauma lies mostly with young, school-aged male players. This has informed the next phase of inquiry which will assess fracture patterns, ophthalmological injury, concussion and long-term outcomes of facial trauma in this high-risk group.

1. Sport and recreation injury statistics [Internet]. ACC. [cited 2023 Apr 16]. Available from: <https://www.acc.co.nz/newsroom/media-resources/sport-and-recreation-injury-statistics/>

id #1632

## Salvage free-flap reconstruction of deep sternal wound infections: can we use the internal mammary vessels?

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**Background:** Deep sternal wound infection (DSWI) post coronary artery bypass grafting (CABG) is a challenging complication with an incidence of 0.2 to 8% and a mortality rate of 7.3 to 21.6% (1).

Whilst pedicled flaps are the workhorse option for sternal reconstruction, free flaps are increasingly used for salvage cases of DSWI. In the setting where the left internal mammary artery (LIMA) has been used for cardiac revascularisation, most surgeons are hesitant to use the right internal mammary artery (RIMA) as recipient vessels for free flaps for fear of sternal devascularisation. This often necessitates dissection into the base of the neck for suitable vessels and the use of vein grafts to increase pedicle length.

**Case series:** We describe a case series using the free anterolateral thigh flap (ALT) for reconstruction of sternal wounds in patients who have failed multiple pedicled flaps. The ALT flap was successfully anastomosed to the RIMA in these salvage cases with good long-term patient outcomes.

**Conclusion:** The ALT is a good salvage option for reconstruction of sternal wounds following DSWI. The RIMA system appears to be safe to use as a recipient vessel for microvascular anastomoses in patients post LIMA harvest.

1. Perezgrovas-Olaria, R., et al. Deep sternal wound infection and mortality in cardiac surgery: a meta-analysis. *The Annals of Thoracic Surgery*. 2023, 115(1), 272-280.

id #1585

## Full functional recovery of multiple flexor tendon injuries in a concert pianist

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**Background:** Successful functional recovery following significant tendon injury requires both adequate surgical repair and postoperative rehabilitation. Unfortunately, these injuries are often debilitating and functional outcomes are often measured by simple tasks such as turning a key or changing clothing.

**Methods:** A retrospective case report of a 42 year old male concert pianist at The Royal Melbourne Hospital following a sheet metal laceration to his right hand involving multiple flexors.

**Results:** Intraoperatively the patient was found to have a little finger FDP avulsion with 30% bony loss and 100% lacerations of FDP and FDS to the remaining 3 fingers. The little finger FDP was repaired with a transosseous 3-0 nylon suture and stabilising axial K-wire. The remaining flexor tendons were repaired with a 2-0 ticon 4 strand Adelaide core suture and 4-0 nylon epitendinous suture. The patient was seen by the hand therapist 3 days postoperatively and commenced an early active range of motion protocol with 10 repetitions per hour and he continued to have regular review twice weekly. At 3 months post operatively the patient reported a pain free hand with near full range

of motion. He scored 1 on the Disabilities of Arm, Shoulder and Hand questionnaire and has returned to playing the piano at concerts, reporting no significant change in his ability to perform.

**Conclusion:** To our knowledge this is the first report of a concert pianist returning to full function following a significant injury. In a sufficiently motivated patient, it demonstrates that robust tendon repairs and an aggressive early active mobilisation protocol can achieve excellent functional outcomes and near full recovery.

id #1616

## Sclerosing perineurioma of a dorsal finger: A rare lesion

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**Background:** Perineuriomas are rare, benign, slow growing and painless tumours derived from perineurial cells. They usually present as a single asymptomatic nodule and are often found to develop in the digits and palms of young adults, particularly in males. To date, fewer than 50 cases have been reported and when occurring in the hand, have been confined to the palmar surface.

**Methods:** A retrospective case report of a single female patient who presented with a left ring finger dorsal middle phalanx subcutaneous lump.

**Results:** A 55 year old female was seen at The Austin Hospital for management of a finger lump that was asymptomatic and had been present for over 2 decades. The lump was mobile, well circumscribed and rubbery in texture. Ultrasonography showed an oval well defined hypoechoic nodule that appeared consistent with a giant cell tumour. Excision revealed a smooth, white, unencapsulated and non-lobulated lump that was thought to be a schwannoma. Histological analysis identified an unencapsulated nodule comprising small epithelioid to spindle cells within sclerosed stroma. The cells whorl around small, round blood vessels. Immunoreactivity of the lesional cells was positive for epithelial membrane antigen and negative for CD34, S100. These findings are consistent with a perineurioma of the sclerosing subtype.

**Conclusion:** Sclerosing perineurioma is a rare benign tumour of the hand. We believe that this is the first case of a dorsal digital sclerosing perineurioma.

id #1609

## Trends in head and neck lymphoedema management: a review

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Management of head and neck cancer can result in significant sequelae for patients in the form of lymphoedema. Either through direct disruption from surgery or soft tissue injury from radiotherapy, the resultant swelling and pathological tissue changes can manifest externally and internally. This can cause not only visible facial swelling and musculoskeletal discomfort but also compromise swallowing and vocalisation. Traditional surgical lymphoedema management techniques are difficult to perform in the head and neck region and not widely performed. Management for Head and Neck

Lymphoedema (HNL) is largely conservative and this is a review of current management strategies in the literature. Early recognition and referral to hospital services are a crucial step to initiate clinical assessment and treatment planning. Historically, manual lymphatic drainage (MLD) was used to promote lymphatic flow via circular massage techniques. Today, Complete Decongestive Therapy (CDT) has become the mainstay of lymphoedema treatment when MLD is used in conjunction with compression dressings, simple exercises and skin care. Provision via a therapist has evolved to encompass self-management programs to widen access and reduce travel and financial burdens. Ideally the lymphoedema service will also include input from speech pathologists and dietitians to aid speech, swallowing and nutritional deficits. Pneumatic pumps to mimic manual massage have also been adopted for use in CDT. Recent advances in laser therapy have widened the potential scope of management options for patients suffering from HNL. Photobiomodulation (PBM) and CO2 laser has been described for management of lymphoedema in other anatomical areas with reported success and early evidence of its use in HNL is promising. More education and awareness is required for lymphoedema service referrals and adoption of novel management techniques.

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2. Deng J, Lukens JN, Swisher-McClure S, et al. Photobiomodulation Therapy in Head and Neck Cancer-Related Lymphedema: A Pilot Feasibility Study. *Integ Cancer Ther*. . 2021;doi:10.1177/15347354211037938, 10.1177/15347354211037938
3. Shaitelman SF, Cromwell KD, Rasmussen JC, et al. Recent progress in the treatment and prevention of cancer-related lymphedema. *CA Cancer J Clin*. . 2015;65(1):55-81. doi:10.3322/caac.21253, 10.3322/caac.21253
4. Smith BG, Lewin JS. Lymphedema management in head and neck cancer. *CURR. OPIN. OTOLARYNGOL. HEAD NECK SURG*. . 2010;18(3):153-8. doi:10.1097/MOO.0b013e32833aac21, 10.1097/MOO.0b013e32833aac21

## id #1575

### A spoonful of sugar!

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Supernumerary digits and pre-auricular skin tags are common congenital anomalies. Traditional methods for managing these minor conditions have been to perform surgical procedures under general anaesthesia once the child is over 12 months of age.

Often these cases are identified at birth by the neonatal team or parents. Sucrose is an established method of analgesia in neonates and is currently used in the inpatient and outpatient setting as analgesia for minor procedures such as blood tests, nasogastric tube insertion or tongue ties.

We have implemented a consultant led service at Christchurch Hospital to perform minor procedures on supernumerary digits and pre-auricular skin tags with local anaesthetic and sucrose analgesia in infants under 6 weeks of age.

We discuss our technique and parent experience. We believe this service has benefits over the traditional method by avoiding general anaesthesia in a young child, addressing the problem in a timely manner and reducing the requirement of operating theatres in a resource limited environment.

## id #1592

### Biodegradable temporising matrix, a limb saving adjunct in reconstructive surgery

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**Background:** Biodegradable Temporising Matrix (BTM) is an implantable bilayered synthetic matrix. It produces a more robust neo-dermal layer to the wound than a split thickness skin graft (STSG) alone by adding volume, improving blood-supply, and increasing durability.

**Case:** Our patient is a 76 year-old male who presented with circumferential SCC arising within a chronic ulcer and encompassing 50% of the vertical length of the right lower leg. This was on a background of sustaining bilateral full-thickness lower limb burns at 12 years-old which was at that time managed with extensive STSGs. He had undergone a previous left leg above-knee amputation, meaning the patient now depended on his right leg to maintain mobility and independence with an even greater emphasis on performing limb-salvaging surgery. Biopsies and subsequent imaging studies of the right leg lesions revealed a circumferential, well differentiated SCC that extended down to muscle fascia without muscular or bony involvement. The only flap-based reconstructive option for the resulting defect would've been a latissimus dorsi (LD) flap. With his dependence on upper limb strength for his mobility, a free LD flap would have significantly impacted upon this. A decision was, therefore, made to proceed with a staged BTM and subsequent STSG reconstruction.

**Outcome:** A clear resection margin was achieved with the deep margin taken down to muscle belly and tendon. Through use of BTM, we were able to provide a more robust reconstruction than a STSG alone. There was 95% graft take at 1 week post-STSG, and return to baseline mobility with a fully healed robust and pliable wound by 5 weeks, and no wound complication at 5 months. Although radiotherapy wasn't eventually required, the wound was robust enough at week 4 post-STSG to have begun radiotherapy. BTM is a valuable adjunct in reconstructing extensive oncological defects.

## id #1549

### Imaging of spinal cord injuries from high voltage electrical burns

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Although spinal cord dysfunction is a known consequence in 3-7%<sup>[1][2]</sup> of high voltage electrical burns, imaging and electromyographic studies do not appear reliable in diagnosing or determining the extent or level of injury. We present a case study of a 28-year-old male who sustained high voltage electrical burns resulting in paraplegia and bilateral upper limb amputations. MRI repeated over a 5 month interval did not demonstrate radiological evidence of a spinal cord injury, yet his clinical exam showed complete loss of power below L2. Nerve conduction studies were not normal but difficult to interpret.

We review the limited cases of spinal cord injury post high voltage electrical burns in the English literature. Our case highlights the limitation of regular MRI to visualise abnormalities in both the acute and late phases despite obvious clinical dysfunction. For our patient, the lack of MRI findings meant that he could not receive certain supports reserved for spinal cord injury patients, as the criteria for access to these supports requires radiologic evidence. In the patient with a high voltage electrical burn, modified criteria should be made to allow for the diagnosis of spinal cord injury without radiographic findings. This becomes an equity of access issue when these patients are denied spinal

injury specific supports despite having a clear mechanism and abnormal physical exam.

1. [1] Kingsly, P.; Dhanraj, P.; Gupta, A. Recovery after spinal cord injury due to high tension electrical burns: a 5-year experience. 2008. Burns, vol 34, 6.
2. [2] Koller, J.; Orsagh, J. Delayed neurological sequelae of high-tension electrical burns. 1989. Burns vol 15, 3

## id #1550

### Livedo reticularis in burns: a case study and literature review”

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Livedo reticularis is a condition mostly seen in the lower limbs whereby blood flow to the skin is disturbed by vascular spasm with subsequent perfusion and oxygen tension consequences (1). There are no case histories in the English literature of patients with livedo reticularis and cutaneous burns.

We present a case of a scald burn in a 47yo female with a background of livedo reticularis, immune thrombocytopenia, hyperthyroidism and smoking. The initial clinical diagnosis of a superficial to mid-dermal burn wound progressed over a period of a week to become a full-thickness burn requiring skin grafting. This case highlights the significant effect of livedo reticularis in burn depth progression and the need to adjust burn wound management if present.

1. 1. Ngan, V., de Menezes, S. and Oakley, A. DermNet. [Online] 2016. <https://dermnetnz.org/topics/livedo-reticularis>.

## id #1563

### A rare case of a basomelanocytic tumour

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Basal cell carcinomas (BCC) and melanoma (MM) are common cutaneous malignancies. However, the development of a basomelanocytic tumour which simultaneously includes elements of both MM and BCC is extremely rare. We present the case of an 84 year old male who presented with a non-pigmented, non-ulcerated pink nodule of his left upper back.

Excisional biopsy showed a malignant neoplasm centered in the dermis without melanocytic proliferation in the epidermis or at the dermoepidermal junction. The tumour nodule was composed of two morphologically distinct, but spatially intermingled populations of tumour cells. Immunohistochemistry confirmed the presence of a tumour cell population that demonstrates epithelial differentiation, and another tumour cell population that demonstrates melanocytic differentiation. The absence of melanoma in situ, and the spatially intermingled tumour cell populations suggested a tumour with divergent differentiation. Based on the histological features, a collision (basal cell carcinoma and melanoma) tumour was unlikely. A scar re-excision with 20mm

surgical margins and sentinel lymph node biopsies from the left upper back, left neck and left axilla were performed.

Treatment recommendations differ between various centres with some preferring treatment of basomelanocytic tumours as per melanoma in situ with conservative margins, while others recommend a wider excision and consideration for sentinel lymph node biopsy staging.<sup>1-4</sup> The authors consider a wider local excision and possible sentinel lymph node biopsy advisable; however, firm recommendations cannot be provided until more research is available.

1. Mancebo S, Marchetti M, Hollmann T et al. Melanoma in situ colonizing basal cell carcinoma: a case report and review of the literature. Dermatol Pract Concept 2015;5(1):25-30.
2. Satter E, Metcalf J, Lountzis N et al. Tumors composed of malignant epithelial and melanocytic populations: a case series and review of the literature. J Cutan Pathol. 2009;36(2):211-219.
3. Cornejo K, Deng A. Malignant Melanoma Within Squamous Cell Carcinoma and Basal Cell Carcinoma. Am J Dermatopathol 2013;35(2):226-234.
4. Braun-Falco M. Combined malignant melanoma and basal cell carcinoma tumor of the intermingled type. J Cutan Pathol 2007;34(9):731-735.



# Exhibitor List

1



## Royal Australian College of Surgeons

+64 4 385 8247  
college.nz@surgeons.org  
surgeons.org

- Representing nine specialties
- Surgical education/training
- Maintenance of professional standards
- Advocate
- Researcher

2



## New Zealand Association of Plastic Surgeons

Trish Amos  
+64 4 803 3020  
trish.amos@plasticsurgery.org.nz  
plasticsurgery.org.nz

- Peak body for PRS Surgeons in NZ
- Oversight of Ethical and Professional Standards
- Advocate for Members

3

## DBM MEDICAL GROUP

### DMB Medical Group

Ben Diack  
+64 27 788 6650  
ben@dbm.co.nz  
dbm.co.nz

- Allograft Nerve
- Nerve Protection
- infection management
- Infection prevention
- Carpel tunnel
- Trigger finger

4



## Surgical Supplies

Jonathan Cresswell  
+64 21 324 134  
jonathan@surgicalsupplies.co.nz  
surgicalsupplies.co.nz

- MicroAire Power Assisted Liposuction
- LipoGrafter Fat Transfer system
- Polytech Breast Implants
- B-Lite Breast Implants
- Sutures

# Exhibitor List

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## Obex Medical

Helen Jenner  
+64 27 279 7011  
Helen.Jenner@obex.co.nz  
obex.co.nz

- Zephyr Surgical Implants (ZSI)
- Cook Medical - doppler
- Endomag & Neoprobe – Gamma Detection System
- Bien Air micro drill
- BFW Headlights

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## Capes Medical

Merryn Card  
+64 21 556 830  
merryn@capemedical.co.nz  
capemedical.co.nz

- S&T microsurgical instrument
- Nopa precision German instruments
- Sharpoint sutures
- Illuco loupes
- Illuco headlights and headbands
- Illuco Dermatoscopes

7



## Smith and Nephew

Ian Hyam  
+61 450 955 440  
Ian.Hyam@smith-nephew.com  
smith-nephew.com

- PICO◇
- RENASYS◇
- IODOSORBO
- ALLEVYN◇
- VERSAJET◇
- ACTICOAT◇

# Exhibitor List

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## REM Systems

Tony Boyce  
+64 21 373 945  
tboyce@remsystems.co.nz  
remsystems.co.nz

- iDFV Loupes
- DFV Headlights
- Hall Micro Power Plus
- Hall Coolfex
- ConMed True Shot
- ConMed Bio Brace

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## Evolution Healthcare

+64 22 010 3167  
marketing@evolutioncare.com  
evolutioncare.com

- Private healthcare provider:
- Wakefield Hospital
- Bowen Hospital
- Royston Hospital
- Grace Hospital
- Anglesea Hospital

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SheffMed NZ Ltd

## Sheffmed

Perry Nichols  
+64 21 437756  
perry@sheffmed.co.nz  
sheffmed.co.nz

- Liposurg
- Vitruvian Complete
- Fat Collection Systems
- Liposuction Cannulas
- Specialty Surgical Instruments
- Skin Marking Pens

# Exhibitor List

11



## Stratpharma

+61 1800 567 007  
au.order@stratpharma.com  
stratpharma.com

- Strataderm – Professional scar management
- Stratamed – Advanced wound dressing and scar management
- Stratamark – Clinically proven to prevent and treat stretch marks
- Stratacel – advanced dressing for fractional procedures

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## Integra

Scott Johnson  
+64 274 400 622  
scott.johnson@integralife.com  
integralife.com

- PriMatrix – dermal repair scaffold
- SurgiMend PRS – breast reconstruction
- NeuraGen – nerve guide
- Surgical Illumination / Headlights

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## Polynovo

Katie Martin  
+64 21 284 7393  
Katie.m@polynovo.com  
polynovo.com

- NovoSorb BTM
- NovoSorb MTX

# Exhibitor List

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## Aroa Biosurgery

Greg Engelbrecht  
+64 21 587 091  
Gregory.Engelbrecht@aroabio.co.nz  
aroa.com

- Products for soft tissue repair in:
- Plastics and reconstructive surgery
- Complex wounds
- Hernia repair

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## LMT/LifeHealthcare

Jane Kinsella-Neill  
+64 21 773 152  
jane.kinsellaneill@lifehealthcare.co.nz  
lifehealthcare.co.nz

- Synovis GEM Coupler & MicroClips
- CheckPoint Nerve Stimulator
- PIP & MCP Replacement Solutions
- Motiva Breast Implants
- GalaFLEX Scaffold
- Medical Z Post Operative Garments

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## Samson Medical Technologies

Andrew Maslin  
+64 21 749 669  
andrew.m@samsonmedtech.com  
samsonmedtech.com

- Costal Cartilage Rib Allograft
- 24k Lipokit and Adinizer fat grafting
- Genefill Body Contouring Fillers

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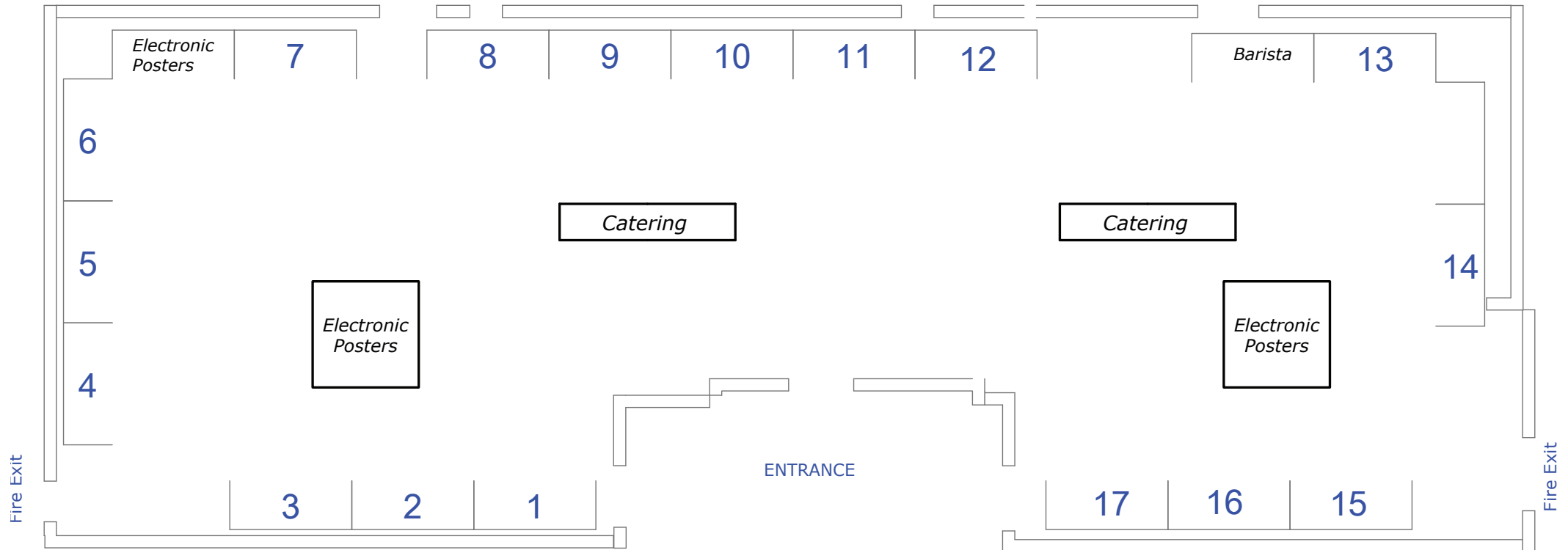


## InterMed

Jan Robinson  
+64 21 760 118  
jan.robinson@intermed.co.nz  
intermed.co.nz

- Mentor Breast Implants

# Exhibitor Floorplan

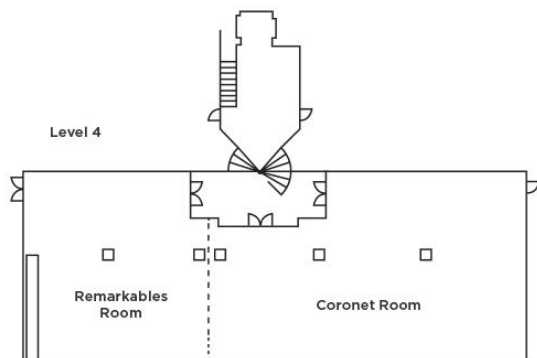


## KEY

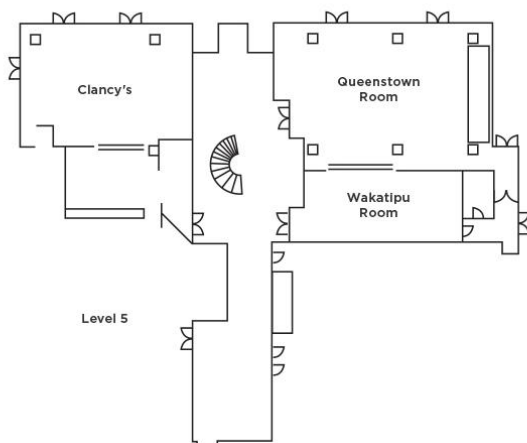
- |   |   |   |                   |    |                      |    |                             |
|---|---|---|-------------------|----|----------------------|----|-----------------------------|
| 1 | Royal Australian College of Surgeons        | 4 | Surgical Supplies | 9  | Evolution Healthcare | 14 | Aroa Biosurgery             |
| 2 | New Zealand Association of Plastic Surgeons | 5 | Obex Medical      | 10 | Sheffmed             | 15 | LMT/LifeHealthcare          |
| 3 | DMB Medical Group                           | 6 | Capes Medical     | 11 | Stratpharma          | 16 | Samson Medical Technologies |
|   |   | 7 | Smith and Nephew  | 12 | Integra              | 17 | InterMed                    |
|   |   | 8 | REM Systems       | 13 | Polynovo             |    |                             |

# Venue Map

## Level 4



## Level 5



## Level 6

