PACE
Primary Aldosteronism
Centre of Excellence

2025 Year In Review

The Primary Aldosteronism Centre of Research Excellence (PACE)

The Primary Aldosteronism Centre of Excellence (PACE) is pleased to present its second annual report.

PACE was established in late 2023 under the National Health and Medical Research Council's Centres of Research Excellence program to address the challenges of diagnosing and managing primary aldosteronism, an often overlooked yet potentially curable cause of hypertension. In 2025, this remit was further addressed through research as reflected in peer-reviewed publications, many of which involve PACE-led international collaborations; engagement through invited presentations; education through presentations at various professional forums together with the highly successful Australian and New Zealand Primary Aldosteronism Online Case Forum; capacity building through dedicated PACE Awards and the Career Establishment Program; and most importantly, consumer engagement and advocacy through the PACE Consumer Council and collaboration with the Primary Aldosteronism Foundation (USA).

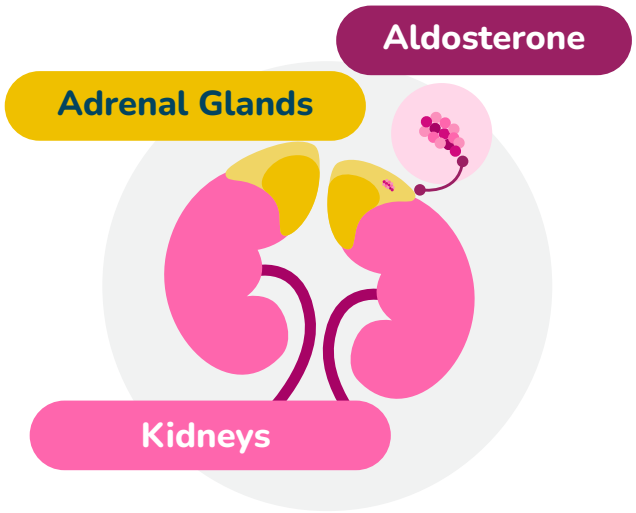
Primary Aldosteronism and the Work of PACE

Primary aldosteronism (PA) is the most common hormonal cause of high blood pressure, affecting an estimated 10% of people with hypertension; yet it remains one of the most underdiagnosed conditions in clinical practice.

PA occurs when the adrenal glands produce excess aldosterone, a hormone that regulates salt and fluid balance. Beyond driving up blood pressure, excess aldosterone places patients at significantly higher risk of heart attack, stroke, atrial fibrillation, and kidney disease compared to other forms of hypertension of the same severity.

Importantly, PA is treatable and, in some cases curable, which makes early and accurate diagnosis critical.

Despite a well-established diagnostic pathway, most people with PA are never tested, and many spend years receiving ineffective treatment. Closing this gap requires coordinated action across research, clinical practice, and policy.



The NHMRC Primary Aldosteronism Centre of Excellence (PACE) was established to address this gap by building a sustainable research infrastructure and fostering national and international collaborations across endocrinology, cardiology, nephrology, and primary care.

PACE aims to improve the diagnosis and management of PA so that fewer patients go undiagnosed, more receive timely and effective treatment, and the long-term burden of hypertension and chronic disease is reduced for patients and the healthcare system alike.

The PACE Team

Chief Investigators

Professor Peter Fuller
Head, Endocrinology Unit, Monash Health and Head, Centre of Endocrinology and Metabolism, Hudson Institute of Medical Research, Victoria

Professor Jun Yang
Head, Endocrine Hypertension Group, Hudson Institute of Medical Research, and Senior Research Fellow, Department of Medicine, Monash Health, Victoria

Professor Michael Stowasser
Director, Endocrine Hypertension Research Centre, University of Queensland Frazer Institute, Princess Alexandra Hospital Queensland

Professor Morag Young
Head, Cardiovascular Endocrinology Laboratory, Baker Heart and Diabetes Institute, Victoria

Professor Grant Russell
Professor, Primary Care Research, Department of General Practice, and Director, Southern Academic Primary Care Research Unit, Monash University, Victoria

Dr. StellaMay Gwini
Senior Research Fellow, School of Public Health and Preventative Medicine, Monash University, Victoria

Biostatistician, Endocrine Hypertension Group, Hudson Institute of Medical Research, Victoria

Professor Christopher Reid
Research Professor, School of Population Health, Curtin University and the School of Public Health and Preventive Medicine, Monash University, Victoria

Professor Markus Schlaich
Dobney Chair in Clinical Research, Dobney Hypertension Centre, Medical School, Royal Perth Hospital Unit, The University of Western Australia, Western Australia

Professor Trevor Mori
Senior Principal Research Fellow, Department of Internal Medicine, Medical School, The University of Western Australia, Western Australia

Professor Gurmeet Singh
Director, Life Course Studies, Menzies School of Health Research, Northern Territory

Associate Investigators

Professor Gang Chen
Melbourne School of Population and Global Health, University of Melbourne, and Adjunct Professor, Centre for Health Economics, Monash University

Dr John Malios
General practitioner and regular Presiding Member of Medical Panel Tribunals. Medical advisor for Agilent Technologies and Thalassaemia and Sickle Cell Australia Presenter for the impairment training course Personal Injury Education Foundation (PIEF).

Professor Helen Skouteris
Head of the Health and Social Care Unit, and Co-Lead of the Division of Evidence Synthesis, Qualitative and Implementation Methods, School of Public Health and Preventive Medicine, Monash University

Associate Professor Julia Harrison
Deputy Head, Monash Medicine Course, Faculty of Medicine, Nursing and Health Sciences, Monash University, Clayton

Professor William (Bill) Rainey
Jerome W. Conn Professor, Molecular & Integrative Physiology and Internal Medicine, and Director, Endocrine Neoplasia Basic Research, University of Michigan, USA

Associate Professor Cherie Chiang
Head of Chemical Pathology, Department of Pathology, Royal Melbourne Hospital.

Endocrinologist, Royal Melbourne Hospital, Austin Hospital & Peter MacCallum Cancer Centre. Clinical Associate Professor, Department of Medicine, The University of Melbourne

Associate Professor Damon Bell
Chemical Pathologist, PathWest Laboratory Medicine Fiona Stanley and Royal Perth Hospital Network, Perth

Endocrinologist, Cardiometabolic Service, Dobney Hypertension Centre, Royal Perth Hospital

Associate Professor, Medical School, University of Western Australia

Professor Ute Scholl
BIH Johanna Quandt Professor for Hypertension and Molecular Biology of Endocrine Tumors,

Berlin Institute of Health at Charité - Universitätsmedizin Berlin, Germany

Dr Marianne Leenaerts
Co-Founder and President, Primary Aldosteronism Foundation

Vale Dr Marianne Leenaerts

We are deeply saddened by the passing of Dr Marianne Leenaerts, an international Primary Aldosteronism (PA) campaigner and Co-Founder and Co-Director of the Primary Aldosteronism Foundation (USA).

Like 600,000 Australians, Dr Leenaerts lived with the condition for many years. She donated $90,000 to help advance the work being done by A/Prof Jun Yang and her team to better understand the barriers and enablers of a timely diagnosis of PA.

The generous donation from Dr Leenaerts is set to have a lasting positive impact on the work conducted by PACE, and ultimately, on improving outcomes for millions of people affected by PA worldwide. Read more

Governance Committees

PACE Advisory Board

The PACE Advisory Board, comprising leading experts in primary aldosteronism, hypertension, and endocrinology, convened in July 2025 to review the research findings and achievements of PACE-related activities over the past year.

Members, Professor Lawrence Beilin (Chair), Professor John Funder AC, Professor Garry Jennings and Professor Alta Schutte, provided strategic guidance on translating research outcomes into clinical practice, offering valuable perspectives to help shape the direction of PACE's ongoing work. We thank the Advisory Board for their continued support and commitment to PACE.

PACE Consumer Council

The PACE Consumer Council has had a productive and impactful year. Members, drawing on their lived experience, have helped shape research priorities, study design, and dissemination of findings, and have contributed as investigators on grant applications, highlighting the integral role of consumer involvement in our work.

The Council has also engaged with government to advocate for greater awareness of PA and has continued to support patients through the Patient Support Group.

We extend our sincere thanks to all members for their dedication and commitment to improving diagnosis and care.

Primary Aldosteronism Patient Support Group

In 2024, the PA Patient Support Group was established by consumers to provide much-needed support for patients and their families.

Throughout 2025, the Patient Support Group governance committee convened a series of virtual meetings, bringing together those living with primary aldosteronism to foster understanding of the condition and its consequences, and to provide a space for shared experience and peer connection.

To get in touch with the PA Patient Support Group, please scan the QR code or feel free to join the Whatsapp group.

2025 PACE Capacity Building Awards

In 2025, PACE launched the Capacity Building Program, a new initiative designed to strengthen research capability and capacity among health professionals and researchers working across the spectrum of hypertension management, including allied health and nursing.

We would like to congratulate the 2025 PACE Research Capacity Building Travel Award recipients who share their experience with us below:

Dr Elisabeth Ng MBBS (Hons) FRACP, Hudson Institute of Medical Research

The PACE Capacity Building Travel Award was instrumental in facilitating my attendance at the US Endocrine Society (ENDO) conference and the International Aldosterone Meeting, followed by the Endocrine Society of Australia (ESA) conference. At the International Aldosterone Meeting, a specialised forum for aldosterone-related research, I presented my findings on the **evaluation of 68Ga-PentixaFor PET/CT to subtype primary aldosteronism** (PA) in an Australian cohort. This meeting was followed by ENDO 2025, where I presented: (i) **an invited symposium talk on strategies to simplify PA diagnosis and subtyping**; (ii) a Rapid Fire Session on the utility of 24-hour urinary aldosterone for PA diagnosis, and (iii) a poster on **PA markers and their correlation with arterial stiffness in an Australian Aboriginal cohort.**

At the ESA Conference in Perth, I was invited to be part of a cardiovascular endocrinology symposium where I presented on the use of algorithms to subtype PA. I also presented a poster on mineralocorticoid receptor antagonists and differential gene expression *in vitro* and was grateful to have this work recognised with the Best Basic Science Poster award.

Attending these conferences provided exposure to the latest global research on PA management and offered valuable opportunities to connect with fellow clinicians and researchers based both overseas and interstate.

Dr Alexandra Matthews MBBS BSc FRACP, University of Queensland

I was extremely grateful to receive the PACE Capacity Building Travel Award to attend the US Endocrine Society (ENDO) conference in San Francisco. I was also fortunate enough to attend the International Aldosterone Conference, which was also taking place in San Francisco.

At ENDO, I presented a poster titled "The **Utility of 24-hour Urinary Aldosterone Concentration Analysed by LC-MS/MS for the Diagnosis of Primary Aldosteronism**". I had thought-provoking discussions with multiple professional colleagues during the time of my poster presentation that have helped contribute to the content of our final manuscript.

It was incredibly inspiring to hear such esteemed experts presenting on topics related to primary aldosteronism and to establish new networks at the conference.

Of note, I had the pleasure of meeting with Professor Ute Scholl from Germany who we are collaborating with regarding a case report on a patient with familial hyperaldosteronism recently identified at the Princess Alexandra Hospital in Brisbane.

This PACE travel award afforded me the ability to travel to an outstanding international conference that promoted my capacity building in primary aldosteronism and significantly contributed to my professional development.

Dr Sonali Shah MBBS FRACP, Hudson Institute of Medical Research

Attending US ENDO 2025, the 46th International Aldosterone Conference, and the Adrenal Alliance (A5) Symposia 'all' in San Francisco last year has been invaluable to my professional development. I am grateful to the PACE Research Capacity-Building Travel Award for making this possible. Their generous support enabled me to participate in these three international meetings and engage with a global community of endocrine researchers.

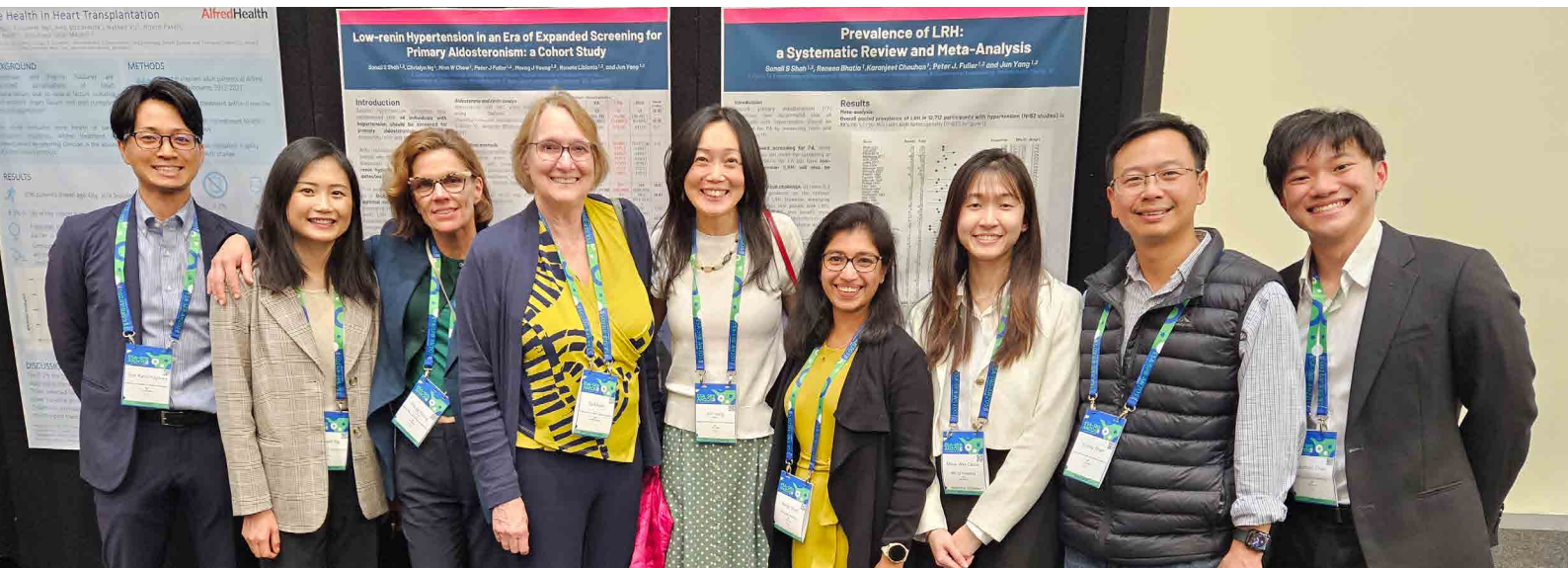
ENDO 2025 was particularly impactful, not only because it was my first time attending such a large conference, but also because I had the privilege of sharing aspects of our research on **low-renin hypertension, an increasingly recognised subtype of hypertension**. I delivered my first invited international symposium presentation on this topic! Equally meaningful was the opportunity to be exposed to the latest developments in adrenal disorders, hypertension mechanisms, and emerging therapies. Engaging with specialists whose work shapes the field broadened my perspective on endocrine hypertension, highlighting new research directions and collaborative opportunities. These experiences reflect the scientific exchange and networking that PACE supports.

Dr Sho Katsuragawa MD MPH, Hudson Institute of Medical Research

I am sincerely grateful to PACE for awarding me the Research Capacity Building Travel Award to attend the 2025 Endocrine Society of Australia conference, where I gave an oral presentation based on our recent publication in The Lancet Diabetes & Endocrinology (October 2025); **a systematic review and meta-analysis investigating the impact of post-treatment renin status on cardiovascular, renal, and mortality outcomes in medically treated patients with primary aldosteronism**. Following my presentation, I received insightful questions, which revealed a key gap in current evidence -no studies have investigated optimal renin monitoring strategies in this context. This feedback helped refine and strengthen the focus of my PhD research, which aims to develop evidence-based strategies for optimising medical management of PA.

The conference also provided opportunities for networking that have broadened my professional network and deepened my understanding of how basic science discoveries can be translated into clinical practice.

Attending the ESA Annual Scientific Meeting has been an invaluable experience that has enabled me to share my research with peers and leaders in the field and significantly contributed to my capacity building in PA research and to my professional development as a clinician-scientist.



Dr Sandra Hakim, PhD (Biochemistry), NACReN Research Fellow, Monash University, Honorary Appointment: Peninsula Health

The Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT) and Hypertension Australia (HA) Joint Scientific meeting was held in Adelaide from 9 - 12 December, 2025. This meeting showcased some fantastic research across pharmacology, toxicology, and hypertension, including primary aldosteronism. My attendance at this conference was supported by a travel grant generously provided by PACE.

I had the great privilege of presenting the data from a recent study in an oral presentation at this conference: A **qualitative study exploring the basis of low screening and diagnostic rates, as well as sub-optimal management of primary aldosteronism** (PA). The ASCEPT-HA conference also provided an opportunity to learn about current cutting-edge research in hypertension to understand how my current work is situated within the current state of the field; share research recently undertaken by my colleagues and I, and; develop networks with others conducting hypertension research."

In addition to gaining inspiration for several future follow-on projects, I was fortunate to be in the presence of many wonderful researchers. I am hopeful that I will collaborate with many of them on future projects.

PACE Career Establishment Program

PACE launched the Career Establishment Program to support early and mid-career researchers build independent and sustainable careers in primary aldosteronism. This program provides bridge funding to financially support researchers while they pursue independent funding opportunities, ensuring that promising research is not interrupted during critical career transitions.

In 2025, this program supported Dr Renata Libianto, whose research into novel biomarkers of primary aldosteronism represents an exciting and important frontier in improving the early detection and diagnosis of PA. Her experience is shared with us below:

Dr Renata Libianto MBBS PhD, Hudson Institute of Medical Research

Following completion of my PhD in 2023, I have been working to establish an independent research career while balancing clinical responsibilities and family commitments. The PACE Award provided essential support that enabled me to develop a research program while working part-time during this early career transition.

During the award period, I achieved several important academic milestones. I published my first senior-author manuscript in the Journal of Clinical Endocrinology and Metabolism and contributed to an international collaborative study published in The Lancet Diabetes & Endocrinology. These publications represent significant steps toward establishing my independent research profile in endocrinology.

I was also honoured to be invited as a speaker at the Annual Conference of the Association of Clinical Endocrinologists and Diabetologists of Bangladesh, reflecting growing international recognition of my work. In addition, I contributed to the academic community through peer-review activities for the Journal of Clinical Endocrinology and Metabolism and Endocrine Connections.

Capacity building and mentorship have been key components of my development. I supervised six junior doctors undertaking research projects related to primary aldosteronism. I am currently leading two prospective clinical studies: one investigating the gut microbiome in individuals with primary aldosteronism, and another aimed at improving detection rates of primary aldosteronism among patients with hypertension and cardiovascular disease.

The PACE Career Development Award has provided important support during this early career stage, enabling me to continue developing my research alongside clinical practice. I am grateful for the opportunity and the support provided.

Australian and New Zealand Primary Aldosteronism Forum - Continuing Into 2026

Following the success of the Australian and New Zealand Primary Aldosteronism Case Forum in 2024, and in response to growing interest, PACE continued to host the online Forum in 2025.

Since its inaugural session in October 2024, which attracted over 80 registrants, the Forum has grown substantially, with more than 200 participants in 2025. It brings together a multidisciplinary network of physicians, radiologists, chemical pathologists, surgeons, and endocrine nurses for lively and collaborative discussion of complex PA cases.

We are grateful to all the clinicians who have submitted cases and joined the discussions, and we look forward to welcoming both returning and new participants in 2026. The upcoming forum dates are:

- **Wednesday, June 24, 2026,** 7:30 – 8:30pm (AEST)
- **Wednesday, September 2, 2026,** 7:30 – 8:30pm (AEST)
- **Wednesday, November 11, 2026,** 7:30 – 8:30pm (AEDT)

The Forum is organised by the Primary Aldosteronism Case Forum Organising Committee: Professor Peter Fuller, Associate Professor Jun Yang, Professor Michael Stowasser, Associate Professor Damon Bell, Dr Renata Libianto, Dr Elisabeth Ng, and Dr Moe Thuzar.

At the end of 2025, a survey was conducted of the participants. Feedback from the forum was overwhelmingly positive with 19 out of 20 respondents satisfied with the structure and format, and participants highlighting that the cases presented were highly relevant to their clinical practice. Many said they would recommend the forum to colleagues. There were a number of suggestions for improvement, including hosting the forums at a more NZ-friendly time, incorporating images into the case reviews, and discussion of specific topics, such as PA in pregnancy and resistant hypertension. These suggestions have now been incorporated into the 2026 program.

PACE in National and International Spotlight

Adrenal vein sampling for primary aldosteronism: recommendations from the Australian and New Zealand Working Group. Clin Endocrinol (Oxf) 2025;102(1):31-43.

Members of PACE led a multidisciplinary collaboration, bringing together experts in endocrinology, interventional radiology, chemical pathology, nephrology, endocrine nursing, and consumer representatives to develop the **first standardised evidence-based recommendations for adrenal vein sampling in Australia/New Zealand**. This national consensus initiative addressed major practice variation in a technically complex procedure, with the aim of improving consistency, success rates, and patient care, and included a patient co-designed information brochure to better support informed decision-making and patient understanding of the AVS procedure. View patient brochure

Outcomes after medical treatment for primary aldosteronism: an international consensus and analysis of treatment response in an international cohort. Lancet Diabetes Endocrinol 2025;13(2):119-133.

We also led a landmark international collaboration across 28 centres worldwide to address a major unmet need in primary aldosteronism: the absence of a standardised approach to assessing response to medical therapy. Through expert consensus and analysis of a large global cohort, **this work established the internationally adopted Primary Aldosteronism Medical Treatment Outcomes (PAMO) criteria**, providing the first common framework for monitoring treatment response in clinical practice and research. Published in *The Lancet Diabetes & Endocrinology*, this study has transformed how medical outcomes in primary aldosteronism are defined, benchmarked, and optimised globally. (DOI: 10.1016/S2213-8587(24)00308-5)

Research Highlights

Publications

In 2025, PACE researchers published 24 peer-reviewed publications in leading international journals, including *The Lancet Diabetes & Endocrinology, The New England Journal of Medicine, JAMA, Circulation,* and *Stroke*. Spanning disciplines from clinical endocrinology, chemical pathology, and interventional radiology to nephrology, cardiology, and implementation science, these publications highlight PACE as an international leader in primary aldosteronism research.

- Yang J, Bell DA, Carroll R, Chiang C, Cowley D, Croker E, Doery JCG, Elston M, Glendenning P, Hetherington J, Horvath AR, Lu-Shirzad S, Ng E, Mather A, Perera N, Rashid M, Sachithanandan N, Shen J, Stowasser M, Swarbrick MJ, Tan HLE, Thuzar M, Young S, Chong W. Adrenal vein sampling for primary aldosteronism: recommendations from the Australian and New Zealand Working Group. *Clin Endocrinol (Oxf)* 2025;102(1):31-43.
- Yang J, Burrello J, Goi J, Reincke M, Adolf C, Asbach E, Brűdgam D, Li Q, Song Y, Hu J, Yang S, Satoh F, Ono Y, Libianto R, Stowasser M, Li N, Zhu Q, Hong N, Nayak D, Puar TH, Wu VC, Vaidya A, Araujo-Castro M, Kocjan T, O'Toole SM, Hundemer GL, Ragnarsson O, Lacroix A, Larose S, Nakai K, Nishikawa T, Ladygina D, Turcu AF, Sholinyan J, Fardella CE, Uslar T, Quinkler M, Mulatero P, Pintus G, Rossi GP, Hahner S, Amar L, Drake WM, Varsani C, Brown MJ, Wu X, Deinum J, Freel EM, Kline G, Naruse M, Prejbisz A, Young WF Jr, Williams TA, Fuller PJ. Outcomes after medical treatment for primary aldosteronism: an international consensus and analysis of treatment response in an international cohort. *Lancet Diabetes Endocrinol* 2025;13(2):119-133.
- Adler GA, Stowasser M, Correa RR, Khan N, Kline G, McGowan MJ, Mulatero P, Murad MH, Touyz RM, Vaidya A, Williams TA, Yang J, Young WF, Zennaro MC, Brito JP. Primary aldosteronism: an endocrine society clinical practice guideline. *J Clin Endocrinol Metab* 2025;110:2453-95.
- Fuller PJ, Yang J, Young MJ, Cole TJ. Mechanisms of ligand-mediated modulation of mineralocorticoid receptor signaling. *Mol Cell Endocrinol* 2025;600:112504.
- Wong M, Hoi AY, Kent JR, Fuller PJ, Yang J, Vincent FB. Evaluation of primary aldosteronism testing in hypertensive patients with SLE in a tertiary hospital. *Lupus Sci Med* 2025;12(1):e001524.
- Ooi A, Khan H, Akram M, Fuller PJ, Milat F, Yang J, Libianto R. Changes in parathyroid hormone across the spectrum of renin-independent aldosteronism. *J Clin Endocrinol Metab* 2025. Epub ahead of print.
- Tee QX, Doery JCG, Desra A, Fuller PJ, Yang J, Lau KK. Adrenal vein sampling: accuracy of earlier sampling post adrenocorticotropic hormone (ACTH) administration. *Clin Radiol* 2025;84:106861.
- Ng E, Gwini SM, Zheng W, Fuller PJ, Yang J. Tools to predict unilateral primary aldosteronism and optimise patient selection for adrenal vein sampling: a systematic review. *Clin Endocrinol (Oxf)* 2025;103(1):3-12.
- Stowasser M, Eisenhofer G, Horvath AR, Schlaich M, Bell D, Yang J, Mulatero P, Young WF Jr, Williams TA, Reincke M. The not-so-shortcomings of seated saline suppression testing in primary aldosteronism (Letter). *Eur J Endocrinol* 2025;193:L36-7.
- Ter C, Koh XH, Tran H, Bancos I, Bassiony M, Araujo-Castro M, Paja M, González Boillos M, Gkaniatsa E, Reincke M, Adolf C, Tran TV, Stowasser M, Nayak D, Grytaas MA, Turcu AF, Matrozova J, Sukor N, Ismail F, Kocjan T, Parasiliti-Caprino M, Baudrand R, Uslar T, Tsuiki M, Murakami M, Yang J, Ng C, Katabami T, Naruse M, St-Jean M, Ceccato F, Saffari SE, Teo AED, Puar TH. A global real-world study assessing total time to adrenalectomy in primary aldosteronism. *Eur J Endocrinol* 2025;193:65-75.
- Woode ME, Chong W, Ng E, Lu-Shirzad S, Gwini SM, Fuller PJ, Yang J, Chen G. Preferences for subtyping primary aldosteronism: a discrete choice experiment. *J Endocr Soc* 2025;10(3):bvaf185.

- Jahan S, Lu ZX, Akram M, Hasanat MA, Fariduddin M, Fuller PJ, Yang J. The diagnostic utility of the captopril challenge test for primary aldosteronism in a Bangladeshi population: a prospective study. *Pathology* 2025. Epub ahead of print.
- Jones A, Tan J, Dao T, Tan J, Wong P, Sztal-Mazer S, Milat F, Yang J, Gilfillan C. Indications for primary aldosteronism screening in people with hypertension and hyperparathyroidism: a multi-centre cohort study. *Endocrine* 2025. Epub ahead of print.
- Saxena M, Laffin L, Borghi C, Fernandez Fernandez B, Ghali JK, Kopjar B, Polu K, Roger SD, Slingsby BT, Strutz F, Vogt L, Weir MR, Rodman D; Launch-HTN Investigators. Lorundrostat in participants with uncontrolled hypertension and treatment-resistant hypertension: the Launch-HTN randomized clinical trial. *JAMA* 2025;334(5):409-418.
- Pamporaki C, Remde H, Constantinescu G, Kürzinger L, Fuss C, Fuld S, Peitzsch M, Schulze M, Alessi F, Lee M, Yang J, Williams TA, Brüdgam D, Reincke M, Gruber S, Beuschlein F, Lenders JWM, Eisenhofer G. The saline infusion test with mass spectrometric measurements of aldosterone to confirm primary aldosteronism. *J Hypertens* 2025;43(10):1666-1674.
- Flack JM, Azizi M, Brown JM, Dwyer JP, Fronczek J, Jones ESW, Olsson DS, Perl S, Shibata H, Wang JG, Wilderäng U, Wittes J, Williams B; BaxHTN Investigators. Efficacy and safety of baxdrostat in uncontrolled and resistant hypertension. *N Engl J Med* 2025;393(14):1363-1374.
- Alessi F, Pamporaki C, Peitzsch M, Constantinescu G, Remde H, Kürzinger L, Fuss CT, Schulze M, Fuld S, Kotwal S, Yang J, Reincke M, Beuschlein F, Lenders JWM, Eisenhofer G. Mass spectrometric measurements of 11-deoxycortisol, androstenedione and dehydroepiandrosterone are superior to cortisol to assess selectivity of non-stimulated adrenal vein sampling. *Clin Endocrinol (Oxf)* 2025. Epub ahead of print.
- Ng E, Gwini SM, Zheng W, Fuller PJ, Yang J. Identifying unilateral aldosterone-producing adenomas using published algorithms and imaging: a systematic review and meta-analysis. *Endocr Connect* 2025. Epub ahead of print.
- Katsuragawa S, Le M, Fuller PJ, Yang J. Post-treatment renin status and cardiovascular, renal and mortality outcomes in medically treated primary aldosteronism: a systematic review and meta-analysis. *Lancet Diabetes Endocrinol* 2025;13(12):1041-1053.
- Ananda RA, Mori TA, Yang J. Aldosterone and cardiovascular risk across the lifespan. *Metabolites* 2025;15(8):553.
- Sawyer N, Glendenning P, Schlaich MP, Hooper AJ, Bell DA. Dual-reporting aldosterone by mass spectrometry and immunoassay in the seated saline suppression test may enhance subtype classification of patients with primary aldosteronism. *Pathology* 2025;57(6):730-738.
- Stoner S, Mogambi S, Ko Lok, Ryan Isabelle, Young Karen, Harrower Tamantha, Price Lee, Badrick Badrick, Hickman PE, Stowasser M, Ward G. Investigation of the possible cause of over-estimation of human aldosterone in plasma, using a unique, non-synthetic human aldosterone-free matrix. *Clin Chem Lab Med* 2025;63:2247-53.
- Alexander SPH, Cidlowski JA, Gibb AJ, Kelly E, Mathie A, Peach CJ, Veale EL, Armstrong JF, Faccenda E, Harding SD, Southan C, Davies JA, Coons L, Fuller PJ, Korach KS, McDonnell DP, Oakley R, Radi S, Safi R, Sladek F, Young MJ. The Concise Guide to Pharmacology 2025/26: nuclear hormone receptors. *Br J Pharmacol* 2025;182(S1):S242-S258.
- Stowasser M, Eisenhofer G, Pamporaki C, Yang J, Young WF Jr. Confirmatory testing for primary aldosteronism: setting the record straight under new guidelines. *Hypertension. In press.*

Invited Presentations

In 2025, PACE investigators were invited to present at 20 national and international meetings spanning nephrology, endocrinology, hypertension, and clinical biochemistry reaching audiences across Australia, Malaysia, Taiwan, China, Singapore, Sri Lanka, Canada, the United States, and Europe. This breadth of engagement reflects the growing global recognition of primary aldosteronism as a critical and underserved public health priority, and the central role PACE plays in advancing the field.

National

- AstraZeneca Cardiovascular Research Symposium, Plenary 4 - "RAAS blockade: what's new, what's next?" Sydney, Australia, May.
- EPiCK (Emerging Perspectives in Cardio Kidney) Cardio-Kidney Masterclass - "Primary aldosteronism: screening and assessment." Melbourne, Australia, August.
- Australian and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, CME Program – "Hyperaldosteronism: not to be missed!" August - September.
- Australian and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, Scientific Program – "Structural basis of agonism and antagonism at the mineralocorticoid receptor." August - September.
- Endocrine Society of Australia Annual Scientific Meeting, Perth, Australia, October.
- Hypertension Australia - "Hypertension and hormones; medicine and music" (Paul Korner Lecture). Adelaide, Australia, December.

International

- Winter School in Arterial Hypertension, University of Padua - "Primary aldosteronism: why and how." March (virtual).
- Annual Meeting of the Endocrine Society and the Diabetes Association of the R.O.C. (Taiwan). March.
- Canadian Hypertension Specialist Society Case Forum - "Challenges in the diagnosis and management of primary aldosteronism." May (virtual).
- Annual Malaysian Endocrine & Metabolic Society (MEMS) Scientific Conference - "Primary aldosteronism: lessons from clinics, cohorts, and consumers" (Plenary Session). Kuala Lumpur, Malaysia, May - June.
- Annual Malaysian Endocrine & Metabolic Society (MEMS) Scientific Conference - "To AVS or not to AVS" (Meet the Professor Session). Kuala Lumpur, Malaysia, May - June.
- Annual Malaysian Endocrine & Metabolic Society (MEMS) Scientific Conference - "Primary aldosteronism medical treatment outcomes - follow up beyond 12 months" (Adrenal Symposium Session). Kuala Lumpur, Malaysia, May - June.
- World Hypertension Day Clinical Meeting, Singapore Association of Clinical Biochemistry (SACB) / DiaSorin - "An update on the diagnosis and management of primary aldosteronism." June (virtual).
- 107th Annual Meeting of the US Endocrine Society - "Interpreting adrenal vein sampling" (Meet-the-Professor Session). San Francisco, USA, June.
- 107th Annual Meeting of the US Endocrine Society - "Primary aldosteronism: an Endocrine Society clinical practice guideline." San Francisco, USA, June.
- 107th Annual Meeting of the US Endocrine Society - "Structural basis of agonism and antagonism at the mineralocorticoid receptor" (Symposium). San Francisco, USA, June.
- 12th Great Wall Forum on Hypertension, Urumqi, Xinjiang, China, September (virtual).
- Annual Meeting of the American Society of Nephrology, Houston, TX, USA, November.
- Association of Clinical Endocrinologist and Diabetologist of Bangladesh (ACEDB) Annual Conference - "Mineralocorticoid receptor signalling in hypertension." Dhaka, Bangladesh, October - November (virtual).
- Endocrine Diabetes and Metabolism Hong Kong Webinar - "Updates on primary aldosteronism: the new practice recommendations." Hong Kong, December.

Resources

We are pleased to share a selection of resources that have been developed to support healthcare professionals and those living with primary aldosteronism.

For health professionals

- **Frequently Asked Questions relating to Screening for Primary Aldosteronism**
- **Screening for PA – a guide to switching medications**
- **Adrenal vein sampling (AVS) patient information**
- **Adrenal vein sampling (AVS) for PA**
- **Resistant "Essential" hypertension: could it be primary aldosteronism?**

For consumers

- **Diet and Nutrition**
- **Lifestyle modifications**
- **Low sodium chart**
- **Adrenal vein sampling**

Contact us

Primary Aldosteronism Centre of Excellence (PACE)

27–31 Wright Street Clayton VIC 3168
e: pace@hudson.org.au

Acknowledgement of Country

The Primary Aldosteronism Centre of Research Excellence (PACE) acknowledges the Traditional Owners and Custodians of Country throughout Australia and acknowledges their continuing connection to land, waters and community. We pay our respects to the people, the cultures and the Elders past and present.

PACE
Primary Aldosteronism Centre of Excellence

HUDSON
INSTITUTE OF MEDICAL RESEARCH