



australasian society of clinical immunology and allergy

Scope of Practice

Specialist Physicians in Immunology and Allergy in Australia

INTRODUCTION

The aim of this Scope of Practice is to outline the range of practice of specialist physicians in Immunology and Allergy in Australia (also known as clinical immunology/allergy specialists) and ensure that patients with allergic and other immune diseases receive the highest standard of care, in line with best clinical practice.

This Scope of Practice has drawn from the:

- Royal Australasian College of Physicians (RACP) Advanced Training Curriculum in Immunology and Allergy¹ (please note that this document is not intended to replace the RACP curriculum);
- World Allergy Organisation (WAO) Requirements for Physician Competencies in Allergy²; and
- American Academy of Allergy, Asthma and Immunology (AAAAI) Core Curriculum³.

BACKGROUND

The Australasian Society of Clinical Immunology and Allergy (ASCIA) was formed in 1990 by the amalgamation of the Australian College of Allergy and Clinical Immunology Group of the Australasian Society of Immunology (ASI). A joint training program for specialist physicians in Immunology and Allergy has evolved from this union, with an overriding clinical interest in the science and clinical practice of diseases involving the immune system. A curriculum for advanced training in the speciality was completed in 2010 and is published by the Royal Australasian College of Physicians (RACP). ASCIA is a special medical society affiliated with the RACP and is a member society of the WAO.

CONTEXT

Allergic diseases are increasing throughout the developed world and Australia is no exception. The 2007 ASCIA - Access Economics Report on Allergic disease in Australia stated that 19.6 % of the population suffered from an allergic condition⁴. More recent publications on the prevalence of food allergy⁵ in Australia suggest a prevalence of challenge proven food allergy of 9.8% in 1 year old infants, a staggering statistic. Recent data reports a prevalence of 18% for allergic rhinitis and 8.4% for asthma in adults. Meanwhile ASCIA workforce surveys have revealed that waiting times for appointments vary from 6 weeks to over 12 months.

Primary immunodeficiency diseases⁶ have been diagnosed with a prevalence of 4.9 per 100,000 population in Australia and New Zealand, with double that prevalence recorded in centres with higher numbers of specialists, suggesting problems with access to care. Importantly, preventable complications were common and intravenous immunoglobulin prescribed in 26% of cases in individuals with normal IgG levels, suggesting that issues exist with regard to ascertainment of cases and appropriate management.

ASCIA Scope of Practice Specialist Physicians in Immunology and Allergy in Australia

PREREQUISITE QUALIFICATIONS

Specialist physicians in Immunology and Allergy will be Fellows of the Royal Australasian College of Physicians (FRACP) or hold equivalent specialist physician qualifications from an international body. Many practitioners in the field also hold qualifications in Immunopathology, as Fellows of the Royal College of Pathologists of Australasia (FRCPA).

All specialist physicians in Immunology and Allergy will have completed basic physician training in either adult medicine or paediatrics before undertaking advanced training in this field. The Advanced Training Curriculum in Immunology and Allergy is published by the Royal Australasian College of Physicians (RACP) and represents the scope of training that current trainees in the specialty are currently expected to undertake. In some areas, especially those with workforce shortages, physicians may practise in both paediatric and adult medicine after gaining appropriate experience.

In Australia, specialist physicians in Immunology and Allergy diagnose and treat patients suffering from:

- Allergic disease
- Primary and secondary immunodeficiencies
- Systemic autoimmune and autoinflammatory conditions

The individual scope of practice may differ between specialist physicians in Clinical Immunology and Allergy due to location, experience and the availability of local resources. It will also differ between clinicians trained in paediatric and adult medicine, and for those with qualifications in immunopathology.

PROFESSIONAL ATTRIBUTES

The professional attributes of a consultant physician are outlined in the professional qualities curriculum of the RACP. Important knowledge and skills in this domain include:

- Recognition of limits to expertise and clinical environment to aid patient disposition
- Involvement in ongoing continuing professional development and learning, both formal and informal
- Ongoing involvement in clinical audit
- Teaching under- and post-graduate students, including future specialists
- Awareness of and referral to patient support organisations where appropriate
- Responsible utilisation of health care resources

Specialist physician practice encompasses:

- Knowledge
- Skills
- Professional attributes of clinical practice

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ASCIA Scope of Practice Specialist Physicians in Immunology and Allergy in Australia

PRACTICE IN ALLERGIC DISEASE

Specialist physicians in Immunology and Allergy have the skills and knowledge to be able to diagnose, investigate and construct an evidence-based management plan that meets standards for safety and conforms to best practice for patients suffering from the following conditions:

- Rhinitis and rhinosinusitis
- Eczema, including:
 - Use of oral immunosuppression *
 - Dietary elimination *
- Asthma, wheeze and cough
 - Asthma diagnosis including the use and interpretation of simple spirometry
 - Recognition of severe asthma
 - Knowledge of the use of immune-modulatory therapies in asthma, including biological treatments
- Acute and chronic urticaria *
- Angioedema (without urticaria) *:
 - Initial evaluation *
 - Allergic
 - Idiopathic
 - Drug-induced
- Anaphylaxis * including:
 - Diagnosis of likely cause
 - Confirmation by testing
 - Construction of an anaphylaxis management plan
 - Advice on trigger avoidance
 - Liaison and advice with patient, carers, community groups and institutions to ensure the safety of those diagnosed with anaphylaxis
 - Alert notifications
- Food allergies and intolerance including:
 - Anaphylaxis *
 - Non-IgE-mediated food allergy and hypersensitivity syndromes
 - Prescribing of elimination diets and consultation with specialist dietitians where indicated *
 - Prescribing, supervising and conducting safe oral food allergen challenge testing *
- Drug and vaccine hypersensitivity * including:
 - Diagnosis of drug hypersensitivity
 - Interpretation of *in vivo* and *in vitro* testing to determine a cause of drug allergy
 - Familiarity with protocols for safe conduct of drug hypersensitivity testing

* Anaesthetists with appropriate training may conduct testing for allergy to anaesthetic agents.
- Stinging insect allergy * including:
 - Diagnosis including history of the condition

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ASCIA Scope of Practice Specialist Physicians in Immunology and Allergy in Australia

- Use of specific IgE testing, the role and limitations of skin prick and intradermal testing to facilitate diagnosis
- Prescribing of immunotherapy where appropriate including selection of allergens, regimen of immunotherapy to be used and duration of immunotherapy
- Education regarding allergen avoidance to the patient and carers and communication of an anaphylaxis management including prescription of an adrenaline autoinjector
- Occupational rhinitis, asthma and dermatitis

Specialist physicians in Immunology and Allergy also have the skills and knowledge to prescribe and manage allergen immunotherapy, including:

- Initiating subcutaneous injection immunotherapy (SCIT) *
- initiating sublingual immunotherapy (SLIT) *

Specialist physicians in Immunology and Allergy should also have knowledge of:

- and practice in prescribing of immunomodulatory therapy for allergic and inflammatory conditions *
- alternative and unconventional allergy testing and treatments, to be able to communicate the limitations of these methods to patients and carers.

PRACTICE IN IMMUNODEFICIENCIES

Specialist physicians in Immunology and Allergy have the skills and knowledge to be able to diagnose, investigate and construct an evidence based management plan that meets standards for safety and conforms to best practice for patients suffering from immunodeficiency diseases including primary immunodeficiencies (PID) and secondary immunodeficiencies (ID), as follows:

- Diagnose immunodeficiency states and inherited disorders of immune regulation *
- Diagnose primary and secondary immune deficiency states including familiarity with genetic diagnoses *
- Monitor and manage patients with PID and disorders of immune regulation *
- Manage PID patients over time including the use of antibiotic, immunomodulatory and immune reconstitutive therapies to prevent complications where possible *
- Practise appropriate surveillance of patients with PID and secondary ID to prevent infective and neoplastic complications *
- Diagnose and manage patients with Hereditary Angioedema (HAE) including maintenance, emergency and home therapies *
- Be aware of recommendations for assessment of antibody responses to vaccination and recommendations for safe vaccination in primary and secondary immunodeficiencies *
- Manage patients with HIV infection (in some centres) *

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PRACTICE IN AUTOIMMUNE AND AUTOINFLAMMATORY DISEASES

Specialist physicians in Immunology and Allergy have the skills and knowledge to be able to diagnose, investigate and construct an evidence-based management plan that conforms to best practice for patients suffering from autoimmune and auto-inflammatory conditions, as follows:

- Diagnose and manage patients with systemic autoimmune diseases * including:
 - Systemic Lupus Erythematosus (including neonatal lupus syndrome)
 - Sjogren's syndrome
 - Mixed connective tissue disease
 - Dermatomyositis and polymyositis
 - Primary Raynaud's disease
 - Anti-phospholipid syndrome (primary and secondary)
 - Sarcoidosis
 - Undifferentiated connective tissue disease
 - IgG4 related disease

- Diagnose and manage patients with systemic vasculitides * including:
 - Takayasu arteritis
 - Giant Cell arteritis
 - Polyarteritis nodosa (PAN)
 - Kawasaki syndrome
 - Isolated Central nervous system vasculitis
 - Granulomatosis with polyangiitis (GPA) – formerly Wegener's granulomatosis
 - Churg-Strauss syndrome
 - Microscopic polyangiitis (MPA)
 - Goodpasture's syndrome
 - Henoch-Schonlein purpura
 - Cryoglobulinaemic Vasculitis
 - Hypocomplementaemic Urticarial Vasculitis
 - Cutaneous Leukocytoclastic vasculitis and lymphocytic vasculitis
 - Behçet's Disease

- In some centres Specialist physicians in Immunology and Allergy will manage patients with rheumatoid arthritis and seronegative spondyloarthropathies.

- Diagnose and manage patients with the following autoinflammatory syndromes *
Including:
 - Cyclic neutropenia
 - Familial Mediterranean Fever (FMF)
 - Tumour necrosis factor- α associated period syndrome (TRAPS)
 - Hyper-IgD syndrome
 - Cryopyrinopathies including:
 - Familial Cold autoinflammatory syndrome (FCAS)
 - Muckle-Wells syndrome

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ASCIA Scope of Practice Specialist Physicians in Immunology and Allergy in Australia

- Chronic infantile neurological, cutaneous and articular multi-system inflammatory disease syndrome (CINCA)
- Periodic fever with aphthous stomatitis, pharyngitis and adenitis (PFAPA)
- Chronic recurrent multi-focal osteomyelitis

PROCEDURES CONDUCTED BY SPECIALIST PHYSICIANS IN IMMUNOLOGY AND ALLERGY

- Skin prick testing using commercial allergen preparations including:
 - Familiarity with and provision of a safe clinical environment
 - Performance of skin prick testing according to national international guidelines
 - Selection of relevant allergens to be tested
 - Testing and interpretation of aeroallergens
 - Testing and interpretation of food allergens *
 - Testing and interpretation of allergens in infants <2 years *
 - Testing and interpretation of latex allergens *
 - Limitations and interpretation of testing
 - Regulatory requirements for procurement of allergens and controls
 - Interpretation of the results
 - Communication of results to the patient, carers and other relevant parties
- Skin prick testing using fresh foods or non-commercial preparations * including:
 - Familiarity with and provision of a safe clinical environment
 - Relevant allergens and controls to be tested, risks of testing
 - Limitations and interpretation of testing
 - Communication of results to the patient, carers and other relevant parties
- Intradermal allergy testing using commercial allergen preparations * including:
 - Familiarity and provision of a safe clinical environment
 - Relevant allergens to be tested and their concentrations
 - Limitations and interpretation of testing
 - Regulatory requirements for procurement of allergens
 - Determination of the results of testing
 - Communication of results to the patient, carers and other relevant parties
- Allergen immunotherapy according to current best practice guidelines including:
 - Diagnosis of suitable conditions for treatment by immunotherapy
 - Selection and prescription of allergens
 - Initiation of sublingual immunotherapy
 - Initiation of injectable immunotherapy *
 - Selection of immunotherapy route and regimen to be followed
 - Selection of a safe clinical environment for administration of immunotherapy
 - Communication of the risks and benefits of treatment to the patient and carers
 - Ongoing supervision of maintenance and immunotherapy duration
- Drug allergy testing * including:
 - Familiarity with and provision of a safe clinical environment

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ASCIA Scope of Practice Specialist Physicians in Immunology and Allergy in Australia

- Establishment of the relevant drugs to be tested
- Determination of testing route and protocols
- Limitations and interpretation of testing
- Communication of the clinical relevance of results to the patient, carers and other relevant parties
- Allergen challenge testing * (specifically food and drug challenges) including:
 - Familiarity with and provision of a safe clinical environment
 - Relevant allergens to be tested
 - Determination of a challenge protocol according to current best practice
 - Selection of subject suitable for challenge
 - Limitations and interpretation of results
 - Communicating results to the patient, carers and other relevant parties
 - Oral food allergy challenges performed by physicians who are not specialist physicians in Immunology and Allergy should be prescribed and supervised in consultation with specialist physicians in Immunology and Allergy.
- Patch testing for contact allergens (optional) includes the application of relevant allergen compounds to the skin for the purposes of diagnosing contact sensitivity. Skills required include:
 - Knowledge of appropriate allergens to be tested and their concentrations
 - Skills in the application and reading of contact allergy testing
 - Communication of results to the patient, carers and referring doctors
- Spirometry testing (optional) including the conduct and interpretation of simple spirometry pre- and post- bronchodilator according to American Thoracic Society guidelines
- Flexible Rhinoscopy (optional) including the conduct of rhinoscopy according to current national standards for infection control, the interpretation of results, communication of results to the patient, carers and other relevant parties
- Simple Skin Biopsy (optional) for the diagnosis of inflammatory skin conditions and vasculitis

PRACTICE ENVIRONMENT

Clinical practice is often modified according to the practice environment and judgement of the specialist physician in Immunology and Allergy. For example:

- Immunotherapy to allergens such as insect venom and food challenge testing should only be undertaken in an environment where suitable intensive support and resuscitation facilities are available *
- Care of individuals with complex immunological conditions is often undertaken in a teaching hospital environment *
- Care of individuals with autoimmune conditions and HIV infection may overlap with rheumatologists and infectious diseases physicians *

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ASCIA Scope of Practice Specialist Physicians in Immunology and Allergy in Australia

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ASCIA DETAILS

ASCIA is the peak professional body of clinical immunology and allergy specialists in Australia and New Zealand.

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