

**Director:** President of the Portuguese Medical Association, **Carlos Cortes**

**Deputy Director and Editor:** **Tiago Villanueva**

### Editorial Staff

**Editor-in-Chief:** **Tiago Villanueva**, Acta Médica Portuguesa. Lisbon. Portugal.

**Deputy Editor-in-Chief:** **Helena Donato**, Centro Hospitalar e Universitário de Coimbra. Coimbra. Portugal..

**Associated Editors:** **Bernardo Gomes**, Unidade de Saúde Pública Entre Douro e Vouga I. Santa Maria da Feira. Portugal.; **Edgar Mesquita**, Instituto de Saúde Pública da Universidade do Porto. Porto. Portugal.; **Filipe Martinho**, Hospital Prof. Doutor Fernando Fonseca. Amadora. Portugal.; **Helena Gouveia**, Fundação Champalimaud. Lisbon. Portugal.; **Henrique Alexandrino**, Centro Hospitalar e Universitário de Coimbra. Coimbra. Portugal.; **João Carlos Ribeiro**, Centro Hospitalar e Universitário de Coimbra. Coimbra. Portugal.; **Maria João Lobão**, Hospital de Cascais. Cascais. Portugal.; **Marina Pinheiro**, Unidade de Saúde Pública ACES Cávado III - Barcelos/Esposende. Braga. Portugal.; **Tiago Torres**, Centro Hospitalar Universitário do Porto. Porto. Portugal.

**Editorial Coordination:** Carla de Sousa **Editorial Assistant:** Bruna Duarte **Image Editor:** Rui Matos **Open Journal System:** José Carona Carvalho **Webmaster:** Cloudpro Lda. **Translator:** Miguel Fontes.

**Editors Emeriti:** Alberto Galvão Teles (1978 – 1987), F. Veiga Fernandes (1987 – 1993), A. Sales Luís (1993 – 1996), Carlos Ribeiro (1996 – 1998), J. Germano Sousa (1999 – 2004), Pedro Nunes (2005 – 2010), Rui Tato Marinho (2011 – 2016), José Manuel Silva (2017).

**Publisher's Office:** Ordem dos Médicos (VAT nr 500 984 492)

Av. Almirante Gago Coutinho, 151. 1749-084 Lisboa, Portugal. Tel: +351 21 151 71 00 E-mail: [secretariado@actamedicaportuguesa.com](mailto:secretariado@actamedicaportuguesa.com)

ISSN:0870-399X | e-ISSN: 1646-0758

**Subscriptions:** Portugal: €300.00; International: €350.00.

**AMP38(12) - December 2025**



**Registration:** At the Regulatory Communication Authority (ERC), entry number 106 369

**Editorial Statute:** <http://www.actamedicaportuguesa.com/eng/normas-de-publicacao>

**Open Access:** Acta Médica Portuguesa is licensed under a Creative Commons Attribution Non-Commercial License (CC BY NC).

### Scientific Advisory Board

#### Álvaro Cohen

Representative of the Differentiated Obstetric Ultrasound Competence National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Ana Isabel Santos

Representative of the Nuclear Medicine Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Ana Rita Cravo

Representative of the Pharmaceutical Medicine Competence National Board at Portuguese Medical Association. Lisbon. Portugal.

#### António Franklím Ramos

Representative of the Health Services Management Competence National Board at Portuguese Medical Association. Lisbon. Portugal.

#### António Jorge Silva

Representative of the Medical Hydrology Competence National Board at Portuguese Medical Association. Lisbon. Portugal.

#### António Gandra d'Almeida

Representative of the Military Medicine Competence National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Armando Mansilha

Representative of the Angiology and Vascular Surgery Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### António Marques da Silva

Representative of the Anesthesiology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Carlos Sottomayor

President of the Oncology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Catarina Aguiar Branco

Representative of the Physical Medicine and Rehabilitation Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Daniel Belão

Representative of the Medical Safety Expertise Competence Social National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Duarte Nuno Vieira

Representative of the Personnel Harm Assessment Competence National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Eduardo Netto

Representative of the Radioncology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Fernando Lopes

Representative of the Clinical Coding Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Filomena Botelho

Representative of the Experimental Pathology Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Francisco Esteves

Representative of the Intensive Medicine Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Graça Mesquita

Representative of the Pain Medicine Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Isabel Fragata

Representative of the Neuroradiology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Isabel Lima dos Santos

Representative of the Medical Acupuncture Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Isabel Luzeiro

Representative of the Neurology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Joana Patrícia Tavares Ferreira

Representative of the Ophthalmology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### João Mariano Pego

Representative of the Clinical Pathology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### João Vitor Pina Alves

Representative of the Dermatovenereology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### João Guerra da Costa

Representative of the Clinical Pharmacology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### José Durão

Representative of Conselho Nacional do Médico Interno at Portuguese Medical Association. Lisbon. Portugal.

#### José G. Merino

Georgetown University Medical Center. Washington. United States of America.

#### José Manuel Mira Mendes Furtado

Representative of the Gynecology and Obstetrics Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### José Miguens

President of the Neurosurgery Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### José Neves

Representative of the Cardiothoracic Surgery Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### José Pinho Marques

President of the Sports Medicine Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Lia Sousa Fernandes

Representative of the Geriatrics Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Lino Gonçalves

Representative of the Sexology Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Lisa Vicente

Representative of the Cardiology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Luciana Baêre de Faria Ricca Gonçalves

Representative of the Immunotherapy Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Luís Cadinha

Representative of the Public Health Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Luís Lopes

Representative of the Gastroenterology Specialty National Board at Portuguese Medical Association. Lisboa. Portugal.

#### Luís Monteiro

Representative of the Urology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Manuel Carlos Loureiro de Lemos

Representative of the Endocrinology and Nutrition Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Manuela Silva

Representative of the Psychiatry Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Maria José Costa Almeida

Representative of the Occupational Medicine Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Maria da Graça de Figueiredo Vilar

Representative of the Clinical Addictology Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Marta Janeiro da Costa Dias

Representative of the Pediatric Surgery Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Matthew Clarke

Institute of Cancer Research / University College London Hospitals. London. United Kingdom.

#### Miguel Vilares

Representative of the Maxillofacial Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Nelson José de Sousa Pereira

Representative of the Medical Emergency Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Nuno Diogo

Representative of the Orthopedics Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Nuno Maria Trigueiros da Silva Cunha

Representative of the Otorhinolaryngology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Paula Maria Broeiro Gonçalves

Representative of the Specialty of General and Family Medicine National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Paulo Santos

Representative of the Specialty of Child and Adolescent Psychiatry National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Raquel Tavares

Representative of the Infectious Diseases Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Ricardo Veiga

Representative of the Pathological Anatomy Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Rui Duarte Castro Moreira

Representative of the Stomatology Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Sofia Vidigal e Almada

Representative of the Aviation Medicine Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Susana de Sousa

Representative of the Sleep Medicine Competency National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Susana Tavares

Representative of the Legal Medicine Specialty National Board at Portuguese Medical Association. Lisbon. Portugal.

#### Teresa Magalhães

Medicine Faculty. Universidade do Porto. Porto. Portugal.

