

## A gap analysis of opportunities and priorities for breast surgical research

We read with interest the thoughtful analysis of current priorities in surgical breast cancer research by Ramsey Cutress and colleagues<sup>1</sup> on behalf of the Association of the Breast Surgery Surgical Gap Analysis Working Group. We value the authors' concept of building a national project to identify open research questions in the field of locoregional treatment, a cornerstone of breast cancer therapy. Despite the large numbers of patients with breast cancer, the aims of surgical research are difficult to accomplish because of substantial obstacles that hinder ideas from being transformed into practice-changing data. First, clinical trials are almost exclusively initiated and done in different national settings. As a result, accrual of sufficient case numbers is difficult, time to completion (if reached) is unacceptably long, and underpowered trial results lead to statistical uncertainties. The limitation of research to separate national initiatives also leads to the simultaneous performance of very similar projects: three national randomised trials (SOUND<sup>2</sup>, INSEMA<sup>3</sup>, BOOG13-08<sup>4</sup>) have independently been launched to investigate the omission of sentinel lymph node biopsy in patients with early breast cancer, and three other parallel trials (SENOMAC<sup>5</sup>, POSNOC<sup>6</sup>, SINODAR ONE<sup>7</sup>) aim to confirm the safety of omitting axillary dissection in patients with a positive sentinel lymph node biopsy. Second, there are few opportunities to achieve cross-border funding for academic surgical research, especially when propagating de-escalating treatments. To overcome this fragmentation of European surgical research initiatives, a group of principal investigators leading major European trials founded the international collaborative

non-profit initiative EUBREAST European Breast Cancer Research Association of Surgical Trialists (EUBREAST) in September, 2018. EUBREAST offers an independent scientific forum for its members to develop collaborative, cross-border research projects that draw synergy from leading European expertise, optimising resource utilisation, and joining efforts to achieve solid scientific results in the shortest possible period of time. Because of its multidisciplinary approach to breast cancer, EUBREAST embraces other diagnostic or therapeutic disciplines and broadens collaboration with existing networks, always with the aim of improving patients' quality of life while maintaining or improving oncological outcome, with the goal of allowing patients to not only live longer, but live better.

The path staked out by the Association of Breast Surgery Surgical Gap Analysis Working Group appears of utmost importance in systematically defining priorities for surgical breast cancer research. As a next step, the transformation of research ideas into clinical trials should be optimised by broadening international collaboration and harmonising the efforts of national study groups. The high standard of breast cancer treatment in Europe and the extraordinary commitment of its researchers, if merged into collaborative efforts, are enormous assets to help achieve practice-changing progress in locoregional treatment strategies of breast cancer, and could substantially shorten the time from trial initiation to result implementation.

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\*Oreste D Gentilini, Jana De Boniface, Jean-Marc Classe, Florentia Peintinger, Toralf Reimer, Roland Reitsamer, Isabel Rubio, Marjolein Smidt, Thorsten Kuehn  
gentilini.oreste@hsr.it

Breast Surgery, San Raffaele University and Research Hospital, 20132, Milano, Italy (ODG); Department of Molecular Medicine and Surgery, Karolinska Institutet, Stockholm, Sweden (JDB); Department of Surgery, Breast Unit, Goran's Hospital, Stockholm, Sweden (JDB); Department of Surgical Oncology, Institut de Cancerologie du Ouest, Nantes, France (J-MC); Institute of Pathology, Medical University Graz, Department for Gynecology and Obstetrics, General Hospital Leoben, Leoben, Austria (FP); Department of Obstetrics and Gynecology, University of Rostock, Germany (TR); Breast Center Salzburg, University Clinic Salzburg, Paracelsus Medical University Salzburg, Salzburg, Austria (RR); Breast Surgical Oncology, Clinica Universidad de Navarra, Madrid, Spain (IR); Department of Surgical Oncology GROW-School for Oncology & Developmental Biology Maastricht University Medical Centre, Netherlands (MS); and Interdisciplinary Breast Center, Klinikum Esslingen, Germany (TK)

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