## Title: A web decision aid to support informed choices about screening for breast cancer

Paola Mosconi<sup>1</sup>, Livia Giordano<sup>2</sup>, Eugenio Paci<sup>3</sup>, Roberto Satolli<sup>4</sup>, Cinzia Colombo<sup>1</sup>, Giulia Candiani<sup>4</sup>, Paola Mantellini<sup>5</sup>, Mario Valenza<sup>6</sup>, Anna Roberto<sup>1</sup>

<sup>1</sup>IRCCS-Istituto di Ricerche Farmacologiche Mario Negri, Milan – Italy.

<sup>2</sup>GISMA, Gruppo Italiano Screening Mammografico, Firenze – Italy.

<sup>3</sup>LILT, Lega Italiana per la lotta contro i tumori, Sezione di Firenze – Italy.

<sup>4</sup>Zadig - Science and Health Communication, Milan – Italy.

<sup>5</sup>Screening Unit, Cancer Prevention and Research Institute – ISPO, Firenze – Italy.

<sup>6</sup>U.O. Centro Gestionale Screening, Azienda Sanitaria Provinciale di Palermo, Palermo – Italy.

**Background.** In Italy, women aged 50-69 are invited to a population-based breast cancer (BC) screening. Physicians, policy makers and patient associations agree on the need to inform women about the benefits and harms in order to allow an aware decision process. Decision aids (DA) are an effective way to support people in their decisions about health. The project aims to foster women's informed choice through development and assessment of a DA leaving women free to get the information they need, according to their health literacy and values, to decide to participate or not to the BC screening for the first time. Benefits, harms and controversies are considered.

**Methods.** The contents of the DA are developed on the basis of the findings of 3 focus groups, organized in the 3 Italian screening centers, and of the analysis of the literature. A web-based platform (*www.donnainformata-mammografia*) was developed to implement the DA in a multilevel model. The impact of the DA will be evaluated in a randomized controlled trial with a two weeks follow-up. The women will be randomized to DA or a standard brochure via web. We will invite 8160 women to obtain the final sample size of 816 women. The primary outcome will be informed choice, measured via knowledge, attitudes and intentions on BC screening. Secondary outcomes: participation rate, satisfaction on information and decisional conflict process.

**Results.** During the first year of the project the main contents of the DA were developed. Findings of the focus groups and the DA pilot contents will be presented.

**Conclusions.** If the informed choice will be reached, the web DA will be open source and implemented on BC screenings. This model could be applied to other health care settings, cancer screenings, as well as public health program.

Funded by Italian Association for Cancer Research IG2015-17274.

Keywords: informed choice, breast cancer screening, decision aid.