

## World Congress on **Breast Cancer**

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### **IORT indications and doses in breast cancer**

**Hamid Reza Mirzaei**

Shahid Beheshti University of Medical Sciences, Iran

**I**ORT in breast cancer is a very good opportunity for patients to be more comfortable with the same effectiveness as conventional radiation therapy. IORT can be used for every patient with breast conservation surgery (BCS) by two purposes: 1) Full dose or Radical IORT, 2) Boost IORT. Full dose IORT indication is for low risk patients means: Lymph node negative, age older than 40 years, tumor size less than 3 cm, preferable ER, PR positive grade 1, 2, without perineural and lymphovascular invasion. IORT dose based on ELIOT trial by Electrone beam is 21Gy and according TARGIT A trial by X-Ray beam is 20 Gy. Boost IORT indication is for high risk patients like younger than 40 years old and pathologic factors other than mentioned criteria. IORT boost dose based on ELIOT trial by Electrone beam is 12Gy and is based on TARGIT B trial by X-ray beam is 20 Gy. If patients receive full dose IORT, they don't need external radiation therapy but those who are treated with boost IORT they need to continue external radiotherapy. By this way we can radiate directly on the tumor bed, thus sparing normal breast paranchyme and other organs from radiation. Two large randomized clinical trials means TARGIT and ELIOT trials, showed identical local control and survival with IORT and conventional radiotherapy.

### **Biography**

Hamid Reza Mirzaei has completed his GP in 1991 at Yazd University of Medical Sciences and he is a specialist in onco-radiology. He graduated from Shahid Beheshti University of Medical Sciences. He is the Director of Iran Radiotherapy Association and is the Deputy Director of research and training in Shohadaye Tajrish Hospital. He has published 13 papers in both domestic and international journals in the field of oncology (and radiotherapy). Since 2008, he has been the Director of Board at International Breast Cancer Conference at Tehran, Iran. He is also the member of material development committee in the field of radiotherapy.

### **Notes:**