

Character Limit 2500

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Topic:

Title: Launch of the breast screening after radiotherapy dataset (BARD) – an England wide initiative to improve screening for breast cancer in women at high risk following radiotherapy to breast tissue under age 36

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Introduction: Women who received radiotherapy (RT) involving breast tissue when aged <36 years most usually for Hodgkin lymphoma are at high risk of developing breast cancer. UK national guidelines published in 2003 recommend that breast screening should start 8 years after RT or at age 25 whichever is later. Screening depends upon individual haemato-oncologists referring at-risk women to breast screening centres and this is prone to delay/error leading to survivor anxiety/frustration and time consuming troubleshooting to correct. A decision was therefore taken to develop a single national dataset of at-risk women (BARD) from which annual screening appointments could be generated.

Methods: 3 at-risk cohorts were identified: **Cohort 1** women irradiated pre-2003 identified from a national recall exercise in 2003 to inform about risk and advise screening in accordance with national guidelines (n~6500); **Cohort 2** women irradiated 2003-2016 identified from National Cancer Registry and Radiotherapy Centre Records (n~2500); **Cohort 3** women irradiated from now into the future identified prospectively at the time of consent for RT. Prior to registration with BARD family physicians were contacted to enquire whether a screening appointment was still appropriate for each survivor.

Results: Project sign-off from NHS England and Public Health England occurred in January 2016. A pilot phase across 4 RT centres in the northwest of England is currently completing (May 2016) and once any learning from this has been incorporated into the processes a national rollout will occur with planned completion in Q4 2016. The NHS Breast Screening Programme will use BARD to identify women irradiated under age 30 years who require screening in any given year. Screening of women irradiated 30-35 years will be arranged by their family physician.

Discussion: An England wide dataset of ~9000 women who have received RT involving breast tissue when aged <36 years has been launched to optimise breast screening in this high risk group. It is hoped that as a result the service to women will be enhanced and breast cancer outcomes improved. A BARD research group has also been formed to undertake relevant research; this will include qualitative assessments of the user experience, evaluation of the effectiveness of current screening with a view to improving the screening

regime, studies of the biological characteristics of RT induced vs sporadic breast cancers and risk reduction trials.