

## RRBSO

- Usually done by age 45 unless family history indicates earlier
- If done before menopause reduces risk of breast cancer (how much?)
- Often combined with long term with breast management – surgery, surveillance / chemoprevention



### Surgical menopause

- Removal of both ovaries, resulting in immediate menopause
- End of reproductive phase of life
- No more periods
- Symptoms may occur
- Long term effects on body

Surgical menopause - positives

- · Reduced risk of ovarian cancer
- Reduction in anxiety over the future
- · No more periods
- No more contraception



## Potential negative effects

- Menopausal symptoms: in particular; hot flushes, night sweats and vaginal dryness
- · Loss of bone density
- Discomfort from vaginal dryness
- Reduced sex drive (libido) associated with loss of ovarian testosterone production
- Loss of fertility
- Increased risk of cardiovascular (heart) disease
  - British Menonause







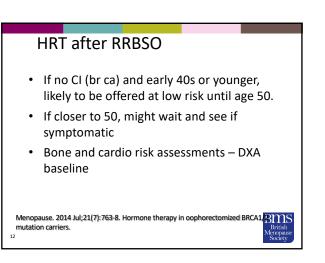


## Is there a need for HRT? NICE Guidance CG 164

BRCA 1 and 2 – RRBSO before natural age of menopause

"Offer HRT up until the time they would have expected natural menopause (average age for natural menopause is 51–52 years)"





#### Safety of HRT following RR BSO – systematic review of literature and guidelines 2019 Climacteric Mar 25:1-9

- 7 studies, not specific to type of HRT
- No evidence that short term use (2.8-4.3 yrs) increased risk of Br if no personal history of br ca
- Progestogen effect
- 11 sets of guidelines published 2009-2016(incl UK NICE NG23)
  - All advise no HRT if personal history br ca, except in individual cases
  - All agree short term use to 50 is considered safe

13

Kotsopoulos et al JAMA Oncol 4(8) 1059-1065

- 872 BRCA 1, average age 43 years
- Follow up average 7 yrs (0.5-22)
- No personal history of breast cancer

"Overall, HRT use after oophorectomy was not associated with an increased risk of breast cancer" (HR 0.97)

Risk Reducing salpingectomy and delayed oophorectomy as an alternative for BRCA mutation carriers.

- Majority of ovarian cancers arise in tubes
- ? Could delay removal of ovaries
- New research underway

# Which HRT?

Continuous Combined E+P unless hysterectomy Pt / clinician choice – oral, transdermal ?IUS at time of surgery Consider progestogen/progesterone issue

Is there a need for testosterone?





