VIRTUAL BREAST BAZAAR

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Radiation Decision

PARTIAL BREAST (APBI)
- ACCUBOOST: 10 treatments delivered 1x/day over 2 weeks
- CYBERKNIFE: 10 treatments delivered 2x/day over 1 week
- BRACHYTHERAPY (SAVI): 10 treatments delivered 2x/day over 5 days

WHOLE BREAST
- ACCELERATED: 15-16 whole breast treatments +4-5 boost to surgical cavity
- STANDARD: 25-28 whole breast treatments +4-8 boost to surgical cavity

BREAST/CHEST WALL + REGIONAL NODES
CYBERKNIFE
DIBH
RADIXACT : 360 degree Treatment
RADIXACT
### RESULTS

Thirty-eight evaluable patients were enrolled between 2/2013-11/2016. Seventeen patients (45%) had right-sided disease; median tumor size was 0.95 cm. (Table 2) Median age was 67 years (range 50-79). Hormone therapy was administered in 29 of 38 patients (76.3%). At a median follow-up of 35 months (range 12-62), all patients were alive, and no patient had local, locoregional or distant disease progression. One patient developed a new ER-negative, invasive ductal cancer.

### MATERIAL & METHODS

- **This was a multi-center Proton Collaborative Group Phase II trial (PCG BRE 007-12).**
- **Inclusion criteria:**
  - Women ≥50 years of age
  - AJCC stage 0-2, ≤3 cm, node negative
  - Nonlobular invasive breast cancer or ductal carcinoma in situ
  - Estrogen receptor (ER)-positive disease
  - Undergoing breast conservation therapy
- **After breast conserving surgery, proton PBI was delivered to 40 Gy (RBE) in 10 fractions over 2 weeks.**
- **All patients received uniform scanning PT except 1 patient who received passively scattered PT.**
- **At least 2 treatment fields were used.**
- **Study primary endpoint was progression-free survival.**
- **Adverse events were prospectively graded using CTCAE version 4.0.**
- **The Breast Cancer Treatment Outcome Scale (BTCOS) was used to assess patient-reported quality of life (QOL) endpoints and cosmesis:**
  - 1 = none
  - 2 = mild
  - 3 = moderate
  - 4 = large
- **Seven grade 2 adverse events occurred:**
  - Radiation dermatitis (n=1, 2.6%)
  - Lymphedema (n=1, 2.6%)
  - Hot flashes (n=3, 7.9%)
  - Dyspnhea (n=1, 2.6%)
  - Fatigue (n=1, 2.6%)
- **No acute grade ≥3 acute or late toxicity attributable to radiotherapy were observed.**
- **Five patients (13%) assigned a BTCOS score of 4 at 1- or 3-year follow-up for change in nipple appearance (n=3), breast shape (n=4), scar tissue formation (n=2), breast texture (n=1) and bra fit (n=1).**
- **Dosimetric endpoints of interest:**
  - Heart V5Gy (median volume of the heart receiving 5 Gy) = 0%  
  - Lung V20Gy = 0%  
  - Lung V10Gy = 0.17%
What’s CHANGING?

- Breast and nodes 5-6 weeks
  - Trial looking at 3 weeks vs 5 weeks
  - Trial looking at radiation vs no radiation in a subset of patients

- Breast only 16-20 treatments
  - 5 treatments in a very selected subgroup
• Partial breast 10 treatments
  – 5 treatments
  – Single treatment
PREVENTION

- EXERCISE
- NUTRITION
COVID

- Endocrine therapy
  - Avoid radiation
  - Delay radiation
- Fewer treatments
Of 128 samples taken in patient and staff areas and from equipment, including objects used by a patient with COVID-19, not one was positive for SARS-CoV-2, the virus that causes COVID-19, the study found.
Pooh?
Yeah Piglet?
I’m tired of all this.
I am too Piglet. I am too.