Background
- Cancer registries represent real-world data of patients with cancer
- There are three main types of cancer registries: Population-based registries (PBCR), hospital-based cancer registries (HBCR) – single centre, and HBCR – collective
- Information retrieved from cancer registries can reveal the impact of the treatment of cancer in the real-world
- Chemotherapy for breast cancer can significantly impact the quality of life (QoL) and other patient-outcomes
- Many randomized controlled trials (RCTs) on breast cancer chemotherapy consider PROs as a part of outcome measures
- We were interested to examine PROs among breast cancer patients receiving chemotherapy in the real-world setting

Objective
- To descriptively evaluate the nature and extent of reporting of patient-reported outcomes (PROs) among patients with breast cancer undergoing chemotherapy (with or without other types of therapies) in published registry audit articles

Methodology

Eligibility Criteria

<table>
<thead>
<tr>
<th>Type</th>
<th>Inclusion</th>
<th>Exclusion/Not of interest (NOIs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Chemotherapy, either alone or in combination with other modalities of breast cancer treatment (immunotherapy, endocrine therapy, surgery, radiotherapy etc)</td>
<td>Chemotherapy not used in breast cancer treatment.</td>
</tr>
<tr>
<td>Comparator</td>
<td>Any comparator</td>
<td>No restriction.</td>
</tr>
<tr>
<td>Outcome</td>
<td>PROs; quality of life, patient satisfaction, all other PROs</td>
<td>All other outcomes.</td>
</tr>
<tr>
<td>Study design</td>
<td>Analysis of some type of registries (disease, cancer, population, hospital, etc)</td>
<td>All other types of papers.</td>
</tr>
<tr>
<td>Databases</td>
<td>PubMed</td>
<td></td>
</tr>
</tbody>
</table>

Publication Information
- Study design: Cross-sectional study
- Study duration: Ranged from 6 months to 7 years
- Study included: 7001
- Country of the first author: USA, Australia, Finland, France, Netherlands, Sweden
- Follow-up duration: Ranged from 6 months to 8 years

Registry Information
- Number of registries: 10 registries were in the registry analyses
- Type of registry: Hospital-based registry, collective, centre: 4, Hospital-based registry, single centre: 7
- Not clear: 2

Name of Registry
- USA: Breast Cancer Collaborative Registry (BCCR)
- Australia: National Cancer Registration Program (NCRP) data repository
- California Cancer Registry (CCR) (2 studies)
- Cancer Surveillance System (CSS) registry, not specified
- Cancer Surveillance System (CSS) registry, Washington
- Carolina Cancer Registry (CCR)
- City of Hope Cancer Registry (2 studies)
- Pennsylvania Cancer Registry
- Systemic Therapies for HER2-positive Metastatic Breast Cancer Study (SPECTRUM)
- UCLA Cancer Registry (2 studies)
- Academic medical center cancer registry (name not specified)

Name of Registries
- Germany: German Cancer Registry (GCR), German Cancer Registry (GCR), German Cancer Registry (GCR)
- Netherlands: Dutch Cancer Registry (DCR), Dutch Cancer Registry (DCR)
- Belgium: Belgian Cancer Registry (BCR), Belgian Cancer Registry (BCR)
- France: French Cancer Registry (FCR), French Cancer Registry (FCR)
- Italy: Italian Cancer Registry (ICR), Italian Cancer Registry (ICR)
- Spain: Spanish Cancer Registry (SCR), Spanish Cancer Registry (SCR)
- Switzerland: Swiss Cancer Registry (SCR), Swiss Cancer Registry (SCR)
- UK: United Kingdom Cancer Registry (UKCR), United Kingdom Cancer Registry (UKCR)
- Other countries:
  - Australia: Victorian Cancer Registry, Australia
  - France: French Cancer Registry, France
  - Germany: German Cancer Registry, Germany
  - Netherlands: Dutch Cancer Registry, Netherlands
  - Belgium: Belgian Cancer Registry, Belgium
  - Switzerland: Swiss Cancer Registry, Switzerland
  - UK: United Kingdom Cancer Registry, United Kingdom Cancer Registry
- Other countries:
  - Australia: Victorian Cancer Registry, Australia
  - France: French Cancer Registry, France
  - Germany: German Cancer Registry, Germany
  - Netherlands: Dutch Cancer Registry, Netherlands
  - Belgium: Belgian Cancer Registry, Belgium
  - Switzerland: Swiss Cancer Registry, Switzerland
  - UK: United Kingdom Cancer Registry, United Kingdom Cancer Registry

Discussion
- Most registries focused on epidemiology and treatment outcomes; PROs were reported in only a few registry analyses
- HER2D was the most frequent type of PRO recorded in all type of registries

Limitations
- Search was limited to PubMed; databases like Embase were not searched
- Search was restricted to publications in English language only
- Male breast cancer cases were not included

Conclusion
- Recording and analyzing PROs in breast cancer registry audit papers is inadequate and has a large amount of variation

References
2. Pakistan, India, Malaysia, Bangladesh, Indonesia, Thailand, Malaysia, South Korea, China, Japan.