Improved survival

- Fertility in HSCT survivors important as part of holistic care
- Survivors of childhood malignancies who received alkylating agents
  - ↓ likelihood of siring/conceiving vs. siblings

Pituitary irradiation of 1 to 30Gy

- Risk of infertility

Of 500 transplant centers in 2002-2007

- 14 pregnancies in a mixed cohort of female HSCT survivors of hematological malignancy

10 / 92 female survivors of childhood/adolescent HSCT achieved pregnancy (38% had non-malignant diagnoses)

Retrospective review of all female allogeneic HSCT survivors

- HSCT at =/=<18 years for hematological malignancies at RCH
- HSCT between 1985 – 2011
- Identify spontaneous pregnancy resulting in live-birth(s)
- Data from 1) current hematologists/endocrinologists, 2) medical records, 3) Self completed questionnaires
- Exclusion: 1) Pre-pubertal, 2) Sexually inactive
- Stratification:
  - Total body irradiation (TBI) - Group 1 & Chemotherapy alone - Group 2
- Descriptive statistics for data analysis

Reasons for exclusion

- <18 years
  - Pre-pubertal
  - Post-pubertal
  - Not in relationship as stated in questionnaires/ medical notes
  - Severe intellectual disability and not in relationship as stated in questionnaires
  - No documentation in clinic notes being sexually active, but did not respond to questionnaires
  - Died at age of 17

<table>
<thead>
<tr>
<th>Group 1 - With TBI</th>
<th>Group 2 - Without TBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient</td>
<td>Age at transplant</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>15.6 years</td>
</tr>
<tr>
<td>2</td>
<td>13.9 years</td>
</tr>
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<td>3</td>
<td>15.5 years</td>
</tr>
<tr>
<td>4</td>
<td>5.7 years</td>
</tr>
<tr>
<td>5</td>
<td>11.7 years</td>
</tr>
<tr>
<td>6</td>
<td>11.3 years</td>
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</tbody>
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