Not Too Old, Not Too Young
Cancer in the Adolescent and Young Adult

Oncology for Scientists
April 23, 2015

Lynda Kwon Beaupin, MD
Disclosures

• Speakers Bureau – Jazz Pharmaceuticals
Objectives:

• Become familiar with the AYA cancer population
• Review the challenges AYA patients face
• Understand how AYAs should be treated according to their disease
• Recognize issues AYA survivors have beyond their primary cancer disease
What is an “AYA”? 

- National Cancer Institute
  - 15 – 39 years of age
Epidemiology

• Each year, ~70,000 young adults and adolescents are diagnosed with cancer.
  – 4% of all cancers in the US

• Lack of attention and progress in this age group
Common Types of Cancer Affecting AYAs

- Leukemia and Lymphoma
- CNS
- Germ Cell* (includes testicular cancer)
- Thyroid
- Malignant Bone Tumors
- Melanoma of the Skin
- Soft Tissue and Kaposi Sarcoma
- Other** (includes breast, cervix, colon, and other less prevalent cancers)

The diagram illustrates the number of observed cases of various cancer types among different age groups. It shows the distribution of cases for ages 25-29, 30-34, and 35-39.

Key:
- **Leukemia and Lymphoma**
- **Thyroid**
- **Melanoma of the Skin**
- **Colon and Rectum**
- **Breast**
- **Cervix and Uterus**
- **Soft Tissue and Kaposi Sarcoma**
- **Germ Cell**
- **CNS**
- **Other**

The source of the data is SEER 18, 2006-2010, ages 25-39.
Children with cancer

Advances among children with cancer have been dramatic.

Cooperative infrastructure
• **1971: US National Cancer Act**
  
  – Highly organized effort that has significantly improved the outcome of adults with cancer
the facts

- Cancer is the #1 disease-related cause of death in AYA.
- Cancer develops 2.7 times more in the 15-29y age group than in <15y age group.
- Incidence of cancer has increased more rapidly in this group than in the younger population.
- Lack of improvement in survival rate compared to younger or older patients.
Fig. 4. Gap in survival rates for selected cancers in 15- to 19-year-olds versus < year-olds. Data from the U.S. SEER programme [3].
Why is that?

• Disease?
  – differences in biology or tolerance of therapy

• System?
  – treatment by physicians less familiar with the disease
  – delay in recognition of malignancy
  – lack of available or failure to enroll pts on clinical trials
• Psychosocial?
  
  – unwillingness to participate in clinical trials
  
  – delays in seeking medical attention with symptoms of cancer
  
  – poor compliance with treatment
AYAs and Clinical Trials

Figure 4: Estimated Proportion of Newly Diagnosed Cancer Patients Accrued to National Treatment Trials, 1997-2003

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• > 90% of children <15y with cancer are treated at institutions that participate in NCI-sponsored clinical trials.

• 20% of 15-19y patients are seen at such institutions, and <10% enrolled in a clinical trial
  – Only 2% of 20-25y

• Spares no geographic region or ethnic group.
Fig. 3. The “adolescent and young adult gap” in cancer clinical trials.

Med Pediatr Oncol 2002;38:1–10
What we have learned from clinical trials for AYA cancer

• Patients should be treated according to their disease, not their age.
Acute lymphoblastic leukemia

- >10y is a poor prognostic factor based on population-based analyses.

- Older children/Young adults have a lower incidence of favourable cytogenetic features, higher incidence of precursor T-cell immunophenotype and Philadelphia (Ph+) chromosome
ALL

• Retrospective analyses in the US, France and the Netherlands:

  – Pediatric regimens resulted in superior outcomes.
  – Nearly twice the event-free and overall survival rates.

- 15-20 yo

- 77 pts → FRALLE-93 (Pediatric)
  - High-risk
  - June 1993 – Nov 1999

- 100 pts → LALA-94 (Adult)
  - Std risk
  - Sept 1994 – May 2000

- Retrospective analysis
- Outcomes measured were CR (complete remission) and EFS (event-free survival)
<table>
<thead>
<tr>
<th>Table 4. Patient Characteristics According to the Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>n</td>
</tr>
<tr>
<td>Median age (y)</td>
</tr>
<tr>
<td>Sex (M/F)</td>
</tr>
<tr>
<td>Median height (cm)</td>
</tr>
<tr>
<td>Median weight (kg)</td>
</tr>
<tr>
<td>Median BSA (cm²)</td>
</tr>
<tr>
<td>Median WBC (G/L)</td>
</tr>
<tr>
<td>Phenotype</td>
</tr>
<tr>
<td>T-ALL (%)</td>
</tr>
<tr>
<td>CD10 + (% of B-ALL)</td>
</tr>
<tr>
<td>CD13+, CD33+</td>
</tr>
<tr>
<td>Cytogenetics</td>
</tr>
<tr>
<td>Poor risk</td>
</tr>
<tr>
<td>t(9;22)/BCR-ABL</td>
</tr>
<tr>
<td>t(4;11)/MLL-AF4</td>
</tr>
<tr>
<td>Hypodiploidy</td>
</tr>
<tr>
<td>Standard risk</td>
</tr>
<tr>
<td>t(1;19)/E2A-PBX1</td>
</tr>
<tr>
<td>TEL-AML1</td>
</tr>
<tr>
<td>Normal</td>
</tr>
<tr>
<td>Hyperdiploidy</td>
</tr>
<tr>
<td>Nonavailable</td>
</tr>
</tbody>
</table>

Abbreviations: NA, not available; NS, non significant; BSA, body-surface area; ALL, acute lymphoblastic leukemia
Fig 1. Overall survival (A) and event-free survival (B) according to the protocol.
Table 7. Specified Cumulated Doses According to the Protocol (FRALLE-93 High-Risk Therapy LALA-94 Standard-Risk Therapy)

<table>
<thead>
<tr>
<th></th>
<th>FRALLE 93</th>
<th>LALA 94</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCR/VDS (inf)</td>
<td>19</td>
<td>4 + 2 CIV/4days</td>
</tr>
<tr>
<td>PRED</td>
<td>4,340 mg/m²</td>
<td>840 mg/m²</td>
</tr>
<tr>
<td>DXM</td>
<td>140 mg/m²</td>
<td>320 mg</td>
</tr>
<tr>
<td>ASP</td>
<td>180,000 U/m²</td>
<td>9,000 U/m²</td>
</tr>
<tr>
<td>DNR/DOX/NOV</td>
<td>280/75/0 mg/m²</td>
<td>150/96/30 mg/m²</td>
</tr>
<tr>
<td>VP-16/CPM</td>
<td>1,200/0 mg/m²</td>
<td>0/12,500 mg/m²</td>
</tr>
</tbody>
</table>

Abbreviations: inf, number of infusions; CIV, continuous intravenous infusion; VCR, vincristine; VDS, vindesine; PRED, prednisone; DXM, dexamethasone; ASP, L-asparaginase; DNR, daunorubicin; DOX, doxorubicin; NOV, mitoxantrone; VP-16, vepeside; CPM, cyclophosphamide.
Conclusion

- Similar clinical features in both groups
- Treated during the same period
- Low frequency of poor prognostic features

- Adolescents treated in the pediatric protocol had significantly better results for remission achievement and EFS

- CCG reported significant improvements in the outcome of high-risk pts, including adolescents (13-20y)

- CALGB also reported more favorable outcomes for younger adults in the last 10y with intensified post-remission therapy modeled after pediatric trials

- Determine whether the outcome for AYA pts differed between pediatric and adult group trials.
• Retrospective comparison

• Compared clinical and molecular features, type and dosage of treatment, remission rate, and clinical outcome.

• 16 – 20y

• 1988-2001 CALGB, n = 124
• 1989-1995 CCG, n = 197
<table>
<thead>
<tr>
<th></th>
<th>CCG, 16 to 20 y, n = 197</th>
<th>CALGB, 16 to 20 y, n = 124</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age, y</td>
<td>16</td>
<td>19</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Sex, no. (%)</td>
<td>129 (65)</td>
<td>87 (70)</td>
<td>.45</td>
</tr>
<tr>
<td>Ethnic distribution, no. (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>141 (72)</td>
<td>90 (73)</td>
<td>.89</td>
</tr>
<tr>
<td>Hispanic</td>
<td>32 (16)</td>
<td>19 (15)</td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>13 (7)</td>
<td>10 (8)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>11 (5)</td>
<td>5 (4)</td>
<td></td>
</tr>
<tr>
<td>Immunophenotype, no. (%), evaluable*</td>
<td>143</td>
<td>92</td>
<td>.56</td>
</tr>
<tr>
<td>Precursor-T</td>
<td>23 (16)</td>
<td>23 (25)</td>
<td></td>
</tr>
<tr>
<td>Precursor-B</td>
<td>93 (65)</td>
<td>64 (70)</td>
<td>.13</td>
</tr>
<tr>
<td>Other†</td>
<td>27 (19)</td>
<td>5 (5)</td>
<td>.006</td>
</tr>
<tr>
<td>Cytogenetics, no. (%), evaluable*</td>
<td>67</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>t(9;22)</td>
<td>2 (3)</td>
<td>5 (6)</td>
<td>.60</td>
</tr>
<tr>
<td>t(4;11)</td>
<td>2 (3)</td>
<td>2 (2)</td>
<td>.75</td>
</tr>
<tr>
<td>Initial WBCs more than 50 × 10^9/L, no. (%)</td>
<td>47 (24)</td>
<td>26 (21)</td>
<td>.84</td>
</tr>
</tbody>
</table>

WBC indicates white blood cell.

*Patients were reviewed and confirmed by central cooperative group pathology and cytogenetic committees.
†Different criteria were used by CCG and CALGB to characterize the immunophenotype and may account for the differences in numbers of patients in the "other" category. For CCG, the "other" category includes patients with coexpression of both B and T markers on lymphoblasts (14 patients) and 13 patients where the immunophenotype could not be fully resolved. For CALGB, only patients with coexpression of B and T markers were included in the "other" category.
Figure 1. Comparison of EFS and OS. (A) Comparison of EFS among CALGB (gray line) and CCG (black line) patients. The 7-year RHR for CALGB patients was 2.2 (CI, 1.6-3.0; P < .001). (B) Comparison of OS among CALGB (gray line) and CCG (black line) patients. The 7-year relative hazard ratio (RHR) for death in CALGB patients was 1.9 (CI, 1.3-2.7; P < .001).
Conclusion

• Older adolescent and young adult patients with ALL had a significantly better outcome when treated on CCG vs. CALGB trials.

• CCG protocols had more vincristine, steroid, L-Asp, and significantly less cyclophosphamide and cytarabine.
Cure rates in **Ewing tumor** patients aged over 15 years are better in pediatric oncology units. Results of *GPOH CESS/EICESS* studies. *Proc Am Soc Clin Oncol* 22: 2003 (abstr)

- Older age is poor prognostic factor in EWS.
- 1426 pts treated with standard therapy
- 73% were treated in ped onc units
- 10y EFS analyzed

- Treatment in pediatric oncology units increases survival in all age groups.
- Older age at diagnosis (> 15y) and treatment outside pediatric oncology units were significant risk factors.

- 190 pts > 18y
- Pts who received therapy according to pediatric guidelines had similar outcomes to pediatric patients.
- Rate of response to chemo was similar to rate observed in children.
- Therefore, adults and children with RMS should receive similar treatment.
Unique Characteristics of Adolescent and Young Adult Acute Lymphoblastic Leukemia, Breast Cancer, and Colon Cancer
Tricoli JV, Seibel NL et al. *JNCI* 103:628-635, 2011

• In 2009, NCI and Lance Armstrong Foundation convened to discuss AYA outcomes in ALL, Breast cancer and Colorectal cancer.

• Examined biological features and epidemiology of these diseases
Breast Cancer

• Breast cancer is the second most common cause of cancer-related death for women in the United States.

• Leading cause of cancer death for young women aged 15–29 years.

• Younger women with breast cancer exhibit an increased likelihood of recurrence and death compared with older premenopausal women

• Young age - indicator of poorer survival.
Interesting facts...

1. Breast cancers in women younger than 40 years are more likely to be “triple-negative,” lacking overexpression of ER, PR, and HER2

2. Early-onset ER-positive breast cancers were more proliferative and more likely to result in metastatic relapse compared with stage-matched ER-positive breast cancers that arose after age 40 years.
3. Although the risk of breast cancer is lower in younger women, survival of women aged 25–30 years is lower across all subtypes and stages.

4. Among pre- and postmenopausal women with breast cancer who have been treated similarly, younger women with stage I or II cancers are twice as likely to suffer local recurrence following lumpectomy and radiation than older women.

There is a need for improved individualized strategies for both local and systemic therapy for young women.
Colorectal cancer

• AYA patients with colorectal cancer have a poorer prognosis and more aggressive disease than older adults

• more advanced tumor stage
• greater frequencies of mucinous histology, signet ring cells, high microsatellite instability (MSI-H)
• higher incidence of mutations in one of the mismatch repair (MMR) genes
Interesting facts...

• There are genetic susceptibility syndromes that are associated with an increased risk of developing colorectal cancer in AYA populations:

  – Familial adenomatous polyposis
    • autosomal dominant (APC gene mutations)
      – polyps can begin to develop in the first decade of life, extensive polyposis with atypia may be present during the teen years, and frank invasive carcinoma often develops in young adults
Hereditary Non-Polyposis Colorectal Cancer (HNPCC, also called Lynch syndrome)

- Autosomal dominant (MMR mutation)
  - 70% lifetime risk of colorectal cancer (often right-sided) and a 50%–70% risk of endometrial cancer
• It has been speculated that delayed diagnosis and treatment play a role in the poorer outcomes observed among AYAs.
  • A retrospective review of 77 pediatric colorectal cancer patients
  • Increased frequency of mucinous among children (62%) than among adults (11%–13%)
  • Overall, 86% of patients had advanced-stage disease at presentation, with more than half exhibiting distant metastases.
Bottom line:

• We need more tissue

• We need to learn more about AYA cancers

• Continue to determine whether there are molecular differences compared to pediatric and elderly forms of the same disease
AYA Psychosocial issues

• A cancer diagnosis and its treatment can impact every aspect of AYA development.

• Cancer is a huge challenge for AYAs:
  – Affects self-esteem – physical appearance, physical energy
  – Compromises education and work goals
  – Non-adherence issues
Psychological distress

• Compared to children, adolescents have more difficulty accepting a cancer diagnosis

• 15-30% of childhood and young adult cancer survivors are seriously troubled psychologically and more likely to report distress
  – Adjustment difficulties
  – Delayed social maturation
  – Mood disturbances
  – Academic difficulties
  – Job and insurance discrimination
  – Relationship problems
  – Increased health concerns
Family and peer support

• Strong family and social support helps AYAs adapt to cancer

• Several studies identify family support and cohesiveness as a most important contributor to positive adjustment
  – However, some pts report emotional isolation from families and peers.
    • Parents expect to see them as strong, upbeat, pleasant

• Sense of hopefulness and maintenance of self-esteem → “protecting mechanisms”
Support groups

• Support groups – good or bad?

• Reports on outings (such as picnics, adventure program, or family retreats) resulted in reports of improvements in self-confidence, independence, and social networking.
Non-adherence

• Adherence can affect survival.
  – Inadequate dosing linked to relapse and survival
• Nonadherence to clinical trials can invalidate results and prevent adequate evaluation.

• Nonadherence among AYAs estimated to be 27-60%.
  – Positive family relationships and open communication between family members are positive factors that support adherence.
  – Overly controlling relationships (parents, health care professionals) have a negative impact on treatment adherence.

• Need for studies that look into effective strategies to promote adherence.
Where to treat them?

• Neither pediatric or adult wards are ideal:
  – Pediatric units – noise and crying, unsuitable activities, toys, books.
  – Adult units – less in common with elderly and dying patients.

• Ideally, Adolescent/Young Adult Units
  – 1990 – Teenage Cancer Unit (UK)
  – Medical staff specially trained to deal with social and psychological issues
  – Advantages are opportunities to share experiences with other pts, involvement of parents, age-related activities
When treatment ends...

• Challenges include transitioning from:

  – Diagnosis to long-term survivorship
  
  – Pediatric to adult medical care
  
  – Psychological and economic dependence to independence
AYA Cancer survivors

• Remember – 100% higher incidence of cancer in 15 – 39y vs. < 15y olds.
  – Overall survival rate is >75%.

• Approximately 0.35% (1/286) of the population of adults > 30y will be survivors of cancer diagnosed between 15 – 29y of age.
Late effects

- Cancer therapy complications that persists or develops beyond 5 years from diagnosis.
  - Physical or psychological

- 2/3 will experience at least one late effect.

- ¼ severe or life-threatening late effect.
Late mortality

• Overall mortality 10-fold compared to general population.
• Risk of death significantly higher in females, cancer dx < 5y, initial dx of leukemia or brain tumor.
• Excess mortality was due to death from primary cancer, second cancer, cardiotoxicity and non-cancer death.
  – Up to 25y after the initial cancer diagnosis.
AYA Programs

- Multidisciplinary approach
- No current recommendations

- Goal: address needs of AYA patients
  - Improve clinical trial enrollment?
  - Promote adherence and compliance
  - Learn more about these patients
• Fertility consult
  – Limited options for females for fertility preservation
  – Sperm cryopreservation for males

• Work with the treating department team
  – Educate pts about treatment trials
  – Help address adherence/compliance issues
AYA Programs in the US
Conclusions

• Young adults and adolescents do get cancer

• Special attention to those 15 – 39 years of age

• Consider referring patients to a cancer center

• AYAs should be treated according to disease, not age
Support for Life
The Cancer Survivors Program at Roswell Park
Cancer Survivor

• “An individual is considered a cancer survivor from the time of diagnosis, through the balance of his or her life. Family members, friends, and caregivers are also impacted by the survivorship experience and are therefore included in this definition”

National Cancer Institute – Office of Cancer Survivorship

Data from the National Cancer Institute on estimated number of cancer survivors and age-adjusted cancer deaths per 100,000 people.
Cancer Survivorship (SEER, 2001-2007)

- 65.9% with 5 year survival in the United States
  - 82.6% in childhood cancers (0-109 years)
  - 12 million survivors
  - 18.1 million by 2020

- Lifetime probability of cancer in the US
  - Men: one in 2
  - Women: one in 3

- Majority diagnosed ≥ 60 years of age
Cancer Survivors in the US

- The number of cancer survivors in the United States
  - 3 million in 1971
  - 9.8 million in 2001
  - 11.7 million in 2007
• Of the 11.7 million people living with cancer in 2007:
  – 7 million were 65 years of age or older.
  – 6.3 million were women.
  – 4.7 million were diagnosed 10 years earlier or more.

• The largest groups of cancer survivors were:
  – Breast (22%)
  – Prostate (19%)
  – Colorectal (10%)
Survivor data:

- Cancer Survivors in the US: 12 million
- Cancer survivors in NY State is 834,900 (NYS DOH)
- Cancer survivors in Erie County: 45,290 (NYS DOH)

**Number of new cancer cases in New York during 2012 is estimated to be 109,440 by the American Cancer Society.**
You saved my life!

Now what?
Current Focus on Survivorship

- Greater emphasis on patient-centered issues by the medical community- quantity AND quantity of life
- Increasing expectations by patients for good quality of life
- Rapid increase in the number of elderly Americans
  - By 2020, 1 in 6 Americans will be elderly
- Cancer is seen as a chronic disease
- Implementation of health care reform
  - Reassessment of our care delivery models in general
  - Focus on cost as it relates to quality
Cancer and its Treatment
Domains of Concern

- Physical/medical
  - Organ toxicity and second cancers
- Psychological
  - Fear of recurrence, anxiety and depression
- Social
  - Changes in relationships, economic and education issues
- Existential and spiritual
  - Loss or deepened meaning in life
- Informational
  - Need for ongoing, comprehensive information
Listening to Survivors
Lance Armstrong Foundation LIVESTRONG™ Poll  n=1020

• Secondary Health Problems
  – 53% - secondary health problems
    • 54% - deal with chronic pain
    • 33% - infertility

• Non-Medical Support
  – 49% - non-medical cancer needs were unmet
  – 53% - practical and emotional consequences of cancer are often harder than medical issues

• Emotional Support
  – 70%- dealt with depression
  – 78% - did not seek professional services

• Relationships
  – 58%- dealt with loss of sexual desire and/or sexual function
**Long Term Follow-up Programs Rationale**

- A need to figure out how to care for the large number of individuals in follow-up
  - Who needs what, when and for how long
- Greater understanding of the consequences of cancer and its treatment
- Focus on the application of interventions to eliminate/reduce sequelae
- Follow-up care setting can be a platform for research
- Begin to focus on survivorship education and training
Survivorship Care
Essential Components

• Assure comprehensive clinical services for survivors of all ages
  – Surveillance for recurrence
  – Screening for new cancers
  – Identification and interventions for consequences of cancer and its treatment (medical and psychosocial)
  – Health promotion strategies
  – Coordination between oncology specialists and primary care providers
Support for Life Clinic

• Multidisciplinary clinic offered to any patient who completed cancer treatment
  – Continue to see their oncologist for surveillance tests and follow-ups
• Address additional challenges
  – psychosocial, rehabilitative, or nutritional concerns
  – promote communication with primary care physicians about their cancer survivors
Survivorship Screening Tool

Please circle the number to indicate how much each of the following issues have been a problem for you. An answer of "0" means that this is not a problem at all for you. An answer of "4" means that it is very much a problem for you. Also, please indicate if you would like more information about each concern.

### PRACTICAL & EMOTIONAL ISSUES:

<table>
<thead>
<tr>
<th>Issue</th>
<th>0: Not a problem</th>
<th>1: A little bit</th>
<th>2: Somewhat</th>
<th>3: Quite a bit</th>
<th>4: Large problem</th>
<th>Would you like more information about this concern?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation or local lodging during treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Finances</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Managing work, school, or home life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Worry about the future</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Finding community resources near where I live</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Substance use - you or in your environment (drugs, alcohol, nicotine, prescriptions, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Feeling isolated, alone or abandoned</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Concerns about fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Getting medicines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Health insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Spiritual or religious concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>How much emotional distress have you been experiencing in the past week including today?</td>
<td>0: No distress</td>
<td>1  2  3  4  5  6</td>
<td>7  8  9  10 Most distress</td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
<tr>
<td>Please circle the number (0-10) that best describes the extent to which your cancer or cancer treatment have caused problems related to sexuality or intimacy</td>
<td>0: No problem</td>
<td>1  2  3  4  5  6</td>
<td>7  8  9  10 Severe problem</td>
<td></td>
<td></td>
<td>Yes [No](is a problem)</td>
</tr>
</tbody>
</table>

Support for Life

The Cancer Survivors Program at Roswell Park