

Caution interpreting meta-analytic evidence regarding excess weight as a risk factor

Arnold *et al.* _____ Page 663

Refining existing meta-analyses and building a meta-analysis on a previously understudied area are both important tasks. Where interventions have been tested in randomized controlled trials (RCTs), the meta-analysis of several small trials might reveal a more precise estimate of the effect and build a degree of certainty that the intervention is clinically effective and no further RCTs are required. This principle might not apply for the evaluation of obesity-cancer associations as analyses in many observational studies are well-powered. The main methodological issue is generally not the need to increase estimate precision (as for RCTs) but rather to explore sources of between-study heterogeneity. Arnold and colleagues encountered some new pitfalls regarding meta-analyses that evaluated obesity-cancer associations, and use this commentary to share these cautions when interpreting these lines of evidence.

Severity Grading of Late Effects in Childhood Cancer Survivors

Hudson *et al.* _____ Page 666

The National Cancer Institute's Common Terminology Criteria for Adverse Events (CTCAE) provides a common rubric for grading adverse outcomes in cancer patients. Hudson and colleagues standardized the severity grading of long-term and late-onset health events applicable to childhood cancer survivors. The authors modified the existing CTCAEv4.03 criteria and aligned grading rubrics from other sources for chronic conditions not included or optimally addressed in the CTCAEv4.03. This manuscript describes the methods of late toxicity assessment used in the St. Jude Lifetime Cohort (SJLIFE) Study.

Hormone receptors and endometrial cancer subtypes

Busch *et al.* _____ Page 727

Using an incident case series of endometrial tumors from the Nurses' Health Study, Busch and colleagues evaluated the potential role of tumor expression of estrogen receptor (ER) and progesterone receptor (PR) to define endometrial cancer subtypes. Analysis aimed to explore how the definition of marker positivity impacts the relationship of marker expression to both risk factor exposures and outcomes prediction, a crucial public health and clinical consideration. Overall, results suggested that ER and PR status measured by immunohistochemistry might usefully distinguish subtypes of endometrial tumors in terms of different etiologic processes. Obesity may be associated with greater endometrial tumor expression of ER and PR. Adding either marker does not appear to improve mortality prediction beyond the standard predictors.

No Association Between Pediatric CT and Hodgkin Lymphoma

Berrington de Gonzalez *et al.* _____ Page 804

Berrington de Gonzalez and colleagues report results from the UK pediatric CT scan study, in which they examined the relationship between radiation dose from CT scans and subsequent risk of HL in a cohort of approximately 180,000 children. Radiation exposure from pediatric CT scans two or more years before diagnosis was not associated with Hodgkin lymphoma in this cohort. These findings are consistent with the majority of previous studies, which do not support a link between ionizing radiation and Hodgkin lymphoma. The results contrast previous positive findings by the authors in this cohort for brain tumors and leukemia, both of which are known to be strongly linked to radiation exposure during childhood.