

Factors associated with decision-making for use of adjuvant chemotherapy (AT) in referred patients (pts) with resected high-risk colon cancer (CC)

**Background:** Evidence-based guidelines consistently recommend AT for stage III CC but AT is not routinely recommended for stage II CC. Actual practice of the evidence varies. The aim of this retrospective study was to identify patient, tumour-specific and temporal factors associated with receipt of AT for stage II CC and exclusion of AT for stage III CC.

**Methods:** Charts were reviewed for pts with resected stage II (n=350) and III CC (n=398) referred to the British Columbia Cancer Agency in 2004 and 2006. . Two-tailed Fisher's exact test was used to assess statistical significance ( $p < 0.05$ ).

**Results:** In stage II pts, 21% (n=72) received AT. Fewer pts received AT in 2006 compared to 2004 (28% vs 16%,  $p=0.015$ ). Compared to untreated pts, stage II pts who received AT were significantly more often younger than 70y (81% vs 54%), married (89% vs 85%), had less than 12 lymph nodes sampled (54% vs 46%), vascular invasion (25% vs 6%), and high grade (28% vs 12%). Gender, ethnicity, residence, high CEA, and

T4 were not associated with AT in stage II. The reason for AT use stated in the consult note: T4 29%, other high-risk feature 51% , pt request 10%, not specified 10%. In stage III pts, 25% (n=99) did not receive AT. Compared to treated pts, stage III pts who did not receive AT were significantly more often 70y and older (76% vs 34%) and saw an oncologist more than 42 days after surgery (13% vs 28%). Gender, ethnicity, residence, grade, lymphovascular invasion, and T4 or N2 status were not associated with no AT in stage III. The reason for no AT stated in the consult note: pt decline 34%, comorbidity 33%, advanced age 22%, delayed presentation 3%, not specified 8%.

**Conclusions:** Receipt of AT in stage II was associated with younger age, marital status,

node retrieval, grade and vascular invasion.. The use of AT in stage II decreased over time. For stage III, older age and delayed presentation were associated with failure to receive AT. Pt decline was the most commonly cited reason for no AT in stage III.

These

data highlight the interplay between patient and tumour factors which impact upon AT decision-making beyond stage of disease alone.