Chronic Myeloid Leukaemia

12.3% of Leukaemia[1]

Philadelphia chromosome positive 85-90%[2] [midpoint of 87.5%]

Acute Lymphoblastic Leukemia

11.5% of Leukaemia[1]

Philadelphia chromosome positive 25%[3]

Chronic Lymphocytic Leukaemia

26.9% of Leukaemia[1]

Renal cell carcinoma

85% of kidney cancers[4]

Advanced/metastatic – 71.5%[5] [NICE guidance states 26% and 17% have stage III and IV disease, and about half of those with curative resection for earlier stages of the disease also go on to develop advanced and/or metastatic disease. Calculation 26+17+(0.5x57) = 71.5%]

Breast Cancer

Metastatic breast cancer at presentation: 5%. Of remaining 95% who present with local breast cancer, 30% will develop metastatic cancer[6]

Total: 33.5%

20-30% with metastatic breast cancer are HER2+ [midpoint 25%], of which 50% will also be hormone receptor positive[6]

Average 12.5%

Non-Small Cell Lung Cancer

85% of lung cancers[7]

Advanced/metastatic at presentation – 70% of all lung cancer[7]. Assumed equal proportion in NSCLC.

Of those not advanced/metastatic at presentation (30% of all lung cancer), 30-60% have early disease progress[8] [midpoint 45%]

Total estimate for proportion incident cases that are advanced/metastatic at presentation, or shortly after:

70% + 45% of the remaining 30% = 83.5%

Proportion of patients expected to have EGFR-TK mutation status results that may be evaluated – 60% [9]
EGFR+ – 10-12% (midpoint 11%) in non-Asian, 30-40% (midpoint 35%) in Asian patients[10]. Globocan data estimates a lung cancer incidence of 1,045,695 (56.3% of total) in Asia, and 779,006 (42.7%) in non-Asian countries. The global prevalence of EGFR mutation is 24.4% ([0.563x0.35]+[0.427x0.11]=0.244).

Proportion of patients that EGFR status can be evaluated and will be EGFR positive – 14.6% [0.6x0.244=0.146]

**Hepatocellular carcinoma**

85-90% of liver cancers [midpoint 87.5%][11]

Eligible patients in UK – 25-35% [midpoint 30%] [12] [based on UK expert advisory group convened by Bayer]

**Thyroid carcinoma**

Differentiated thyroid carcinoma 95% of thyroid cancers [13]

1-4% present with distant metastases [midpoint 2.5%] and 7-23% [midpoint 15%] develop distant metastases [14] - overall 17.5%

Of metastatic disease 66.6% become refractory to iodine [13]

**Pancreatic cancer**

Metastatic 50% and advanced 25% at presentation[15]
References


