

Supplementary information S2 (online only)

Table S2 | Major clinical responses to signal transduction therapies are usually associated with the presence of cancer specific genetic changes detected by molecular diagnostic methods.

CANCER TYPE	DRUG	TARGET	DIAGNOSTICS
Molecular targeted drugs achieving 50-90% clinical response rate and several years survival			
CML	Imatinib	Translocated Abl gene (Bcr-Abl)	FISH
GIST	Imatinib	Mutant C-Kit	IHC/sequencing
Lung cancer	Erlotinib Gefitinib	Mutant EGFR	Sequencing
Molecular targeted drugs achieving around 30% or more clinical response rate and several months or years survival			
Breast cancer	Trastuzumab	High copy of wild type HER-2 gene	IHC/FISH
Colon cancer	Cetuximab	High copy of wild type EGFR	FISH
Molecular targeted drugs achieving less than 30% clinical response rate and a few months survival			
Lung cancer	Erlotinib Gefitinib	wild type EGFR	IHC or no selection
Colon cancer	Cetuximab	Wild type EGFR	IHC