

Molecular analysis of head and neck biopsy

for prognosis and targeted therapy

- Relative gene expression

[EGFR](#)

[ERBB2](#)
[ERBB3](#)

[MET](#)

[VEGFR2](#)

[PDGFR \$\alpha\$](#)

C-KIT

FOXM1

IGFIR

CXCR4

CD133

CYCLIN D1
PTEN

OSTEOPONTIN

SURVIVIN

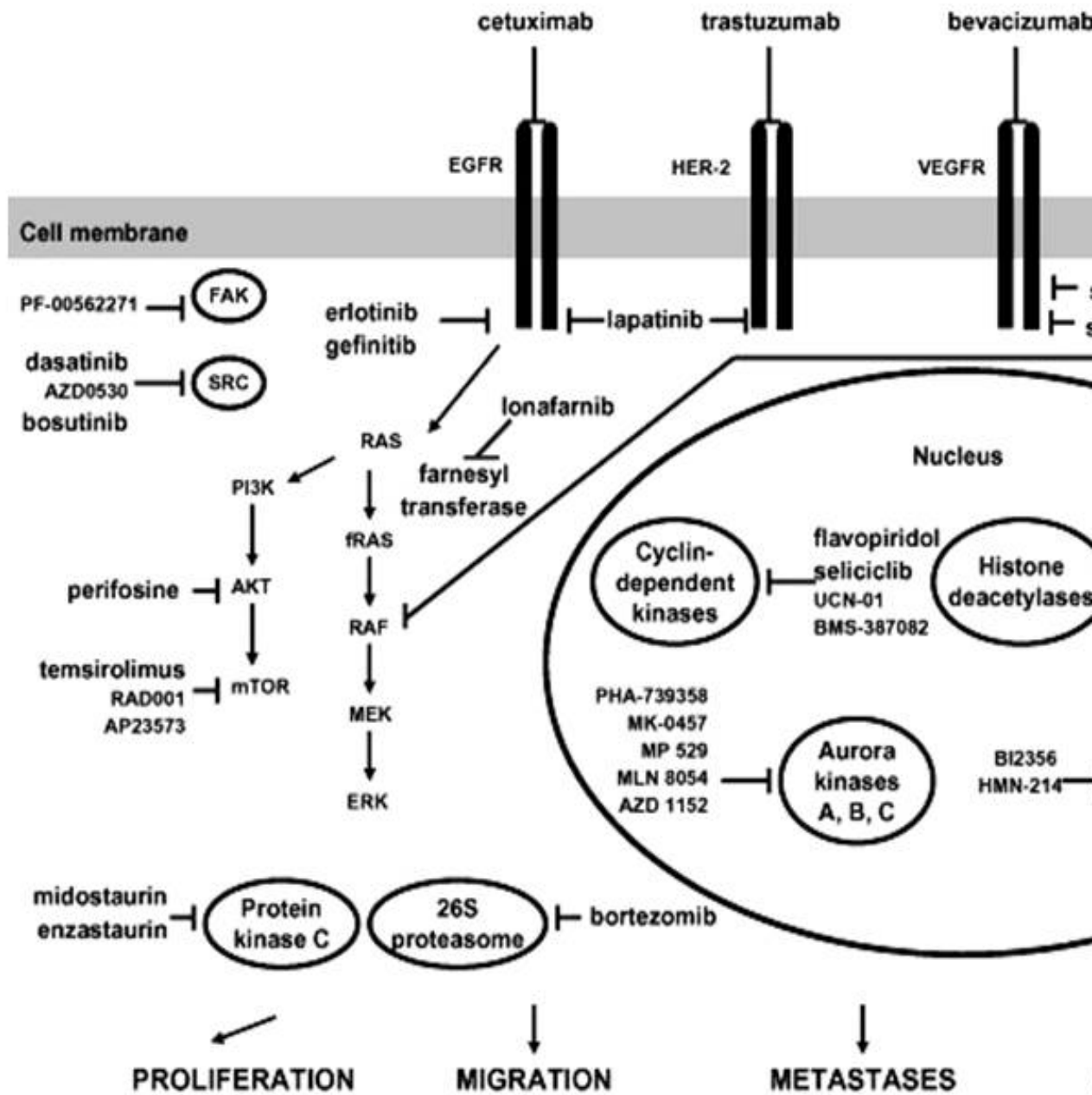
P13K α

AKT

mTOR

DNMT1

SIGNALING PATHWAYS AND POTENTIAL TARGETED THERAPIES IN



Relative quantitative gene expression for response to chemotherapy

BCRP (platinum	,irinotecan,topotecan)
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MRP1 (cyclophosphamide, etoposide, vincristine)
ERCC1, BRCA1 (platinum)
TYMS (5-FU, capecitabine, pemetrexed)
PGP (doxorubicin, paclitaxel, etoposide, vincristine)
RRM1, RRM2, HUR (gemcitabine)
TUBB3, SPARC, TLE3, TAU (taxanes)
MGMT (temozolomide)

HIGH EXPRESSION

□

NO RESPONSE

TOPO2A

(doxorubicin, epirubicin)

TOPO1

(irinotecan, etoposide)

HIGH EXPRESSION

□

RESPONSE