

Latest innovations in NSCLC management: Introduction



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Gefitinib or Carboplatin–Paclitaxel in Pulmonary Adenocarcinoma

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CONCLUSIONS

Gefitinib is superior to carboplatin–paclitaxel as an initial treatment for pulmonary adenocarcinoma among nonsmokers or former light smokers in East Asia. The presence in the tumor of a mutation of the *EGFR* gene is a strong predictor of a better outcome with gefitinib. (ClinicalTrials.gov number, NCT00322452.)

EGFR M+: Post-progression treatment after EGFR TKI's

Treatment of sensitive clones with activating EGFR mutation

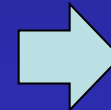
Treatment of resistant clones (T790M, c-met amplification, other)

Treatment of re-emerging sensitive clones with activating EGFR mutation

Reversible EGFR-TKI



Chemotherapy

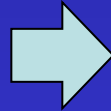


Same Reversible
EGFR-TKI
Comb or Seq

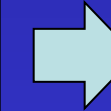
IMPRESS
(Gefitinib)

ICARUS
(Gefitinib)

Reversible EGFR-TKI



Chemotherapy



Different Reversible
EGFR-TKI
Comb or Seq

Reversible EGFR-TKI

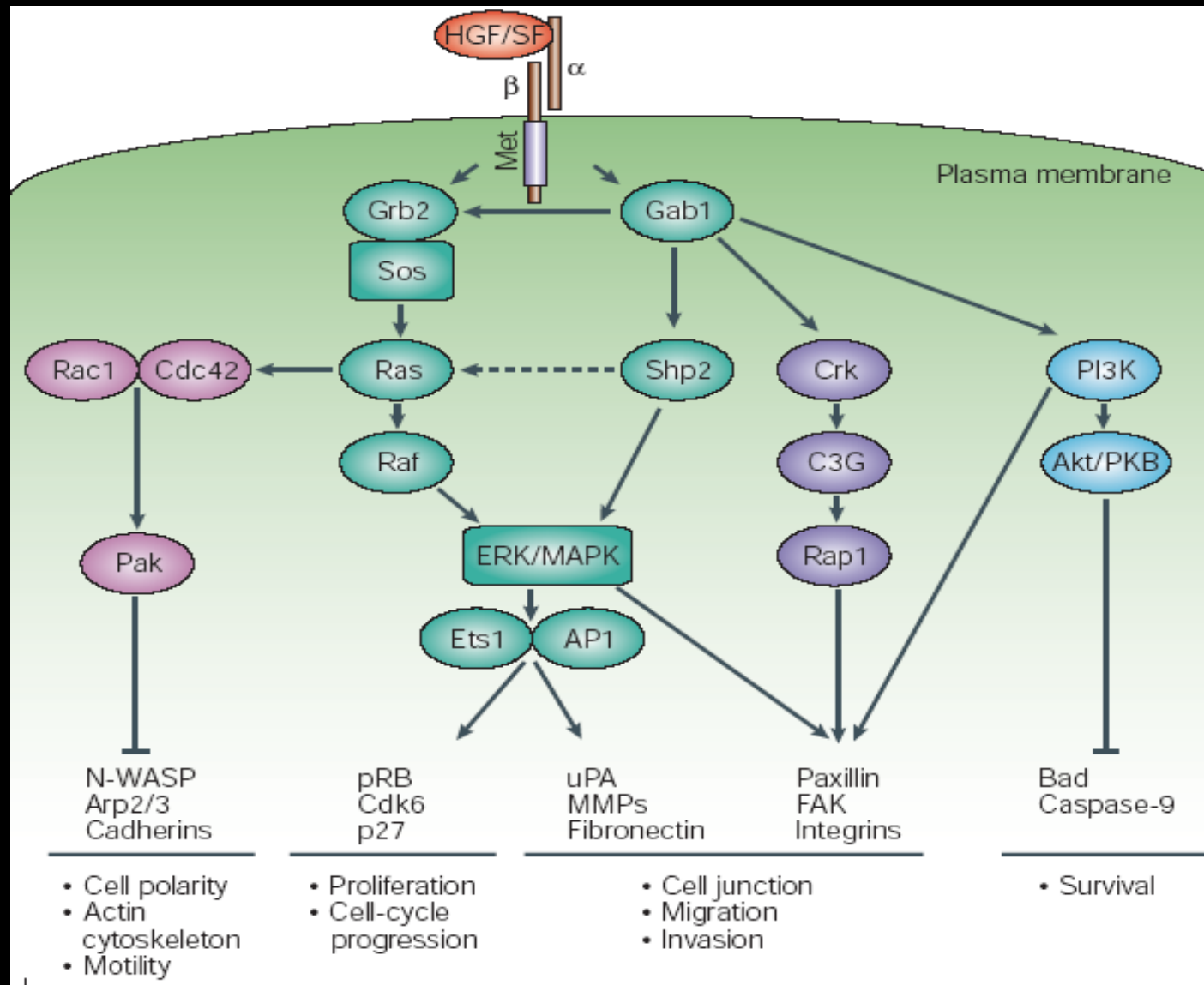


Chemotherapy

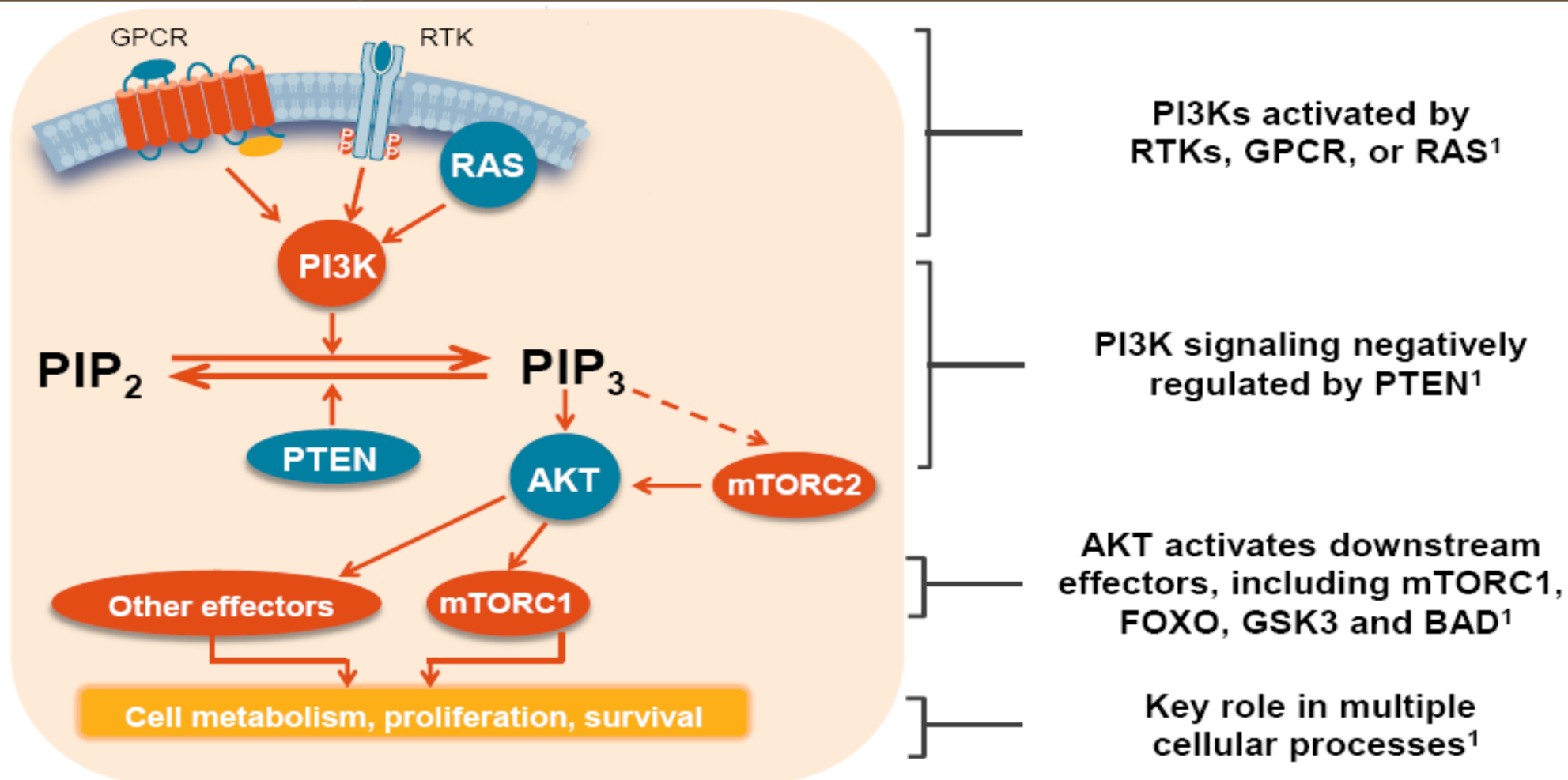


Irreversible
EGFR-TKI

MET Pathways

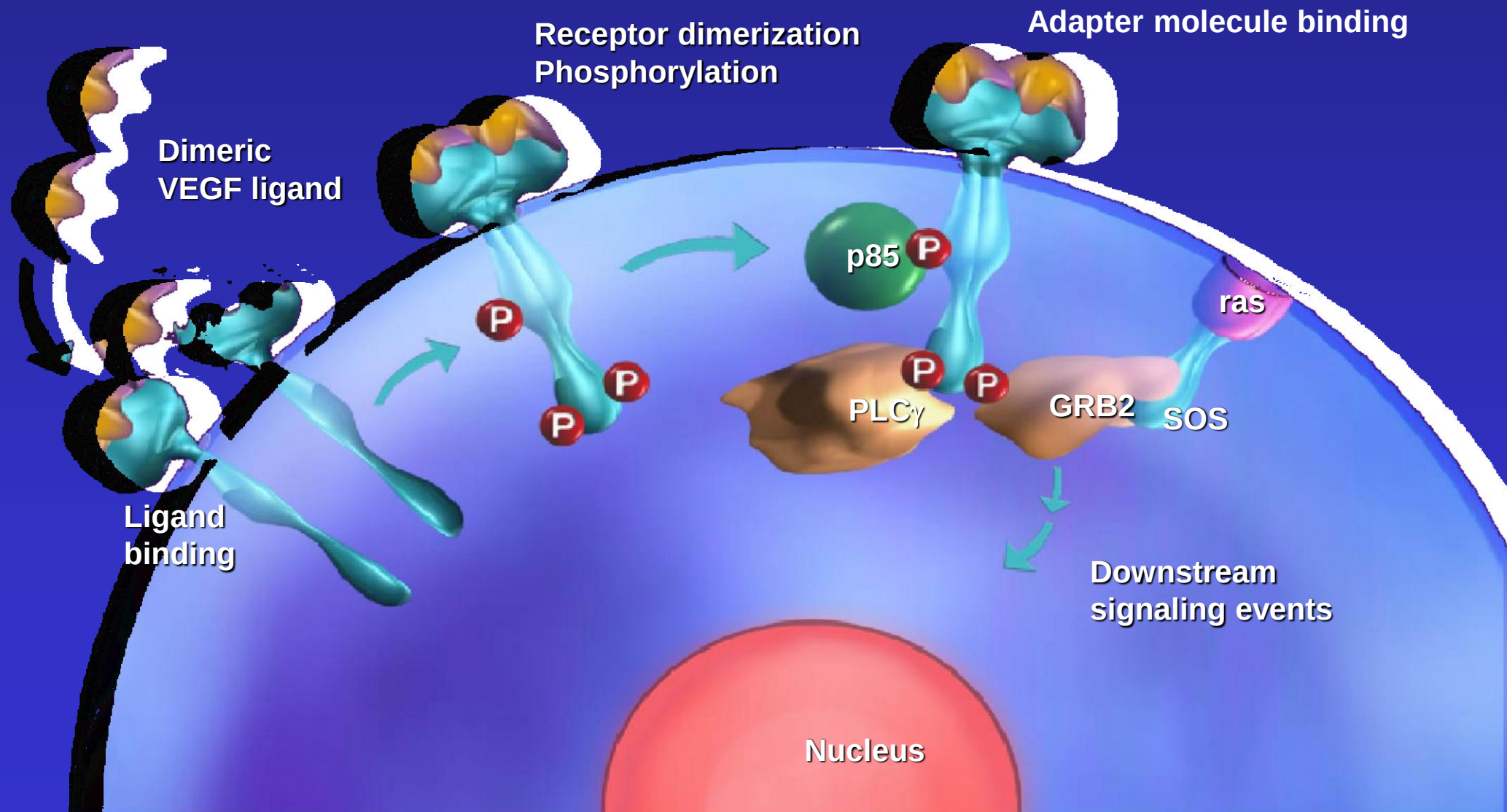


The PI3K/AKT/mTOR Pathway Plays a Key Role in Cellular Metabolism, Proliferation, and Survival



FOXO, forkhead transcription factors; GPCR, G protein-coupled receptor; GSK3, glycogen synthase kinase-3; mTOR, mammalian target of rapamycin; mTORC1, mTOR complex 1; PI3K, phosphatidylinositol 3-kinase; PIP₃, phosphatidylinositol-3,4,5-trisphosphate; PIP₂, phosphatidylinositol-3,4,5-bisphosphate; RTK, receptor tyrosine kinase.

VEGF signaling





clinical practice guidelines

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Metastatic non-small-cell lung cancer (NSCLC): ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up[†]

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