Prognostic biomarker

A prognostic biomarker is a clinical or biological characteristic that provides information on the likely patient health outcome (e.g. disease recurrence) irrespective of the treatment.

A prognostic biomarker helps indicate how a disease may develop in an individual when a disorder is already diagnosed. The presence or absence of a prognostic marker can be useful for the selection of patients for treatment but does not directly predict the response to treatment.

Examples

SGSM1 was considered to be a new prognostic biomarker for patients with LGG. And the study provided a potential therapeutic target for LGG treatment [1].

Plasma cell-free DNA (cfDNA) concentration is a promising prognostic biomarker for patients with glioblastoma. Plasma cfDNA can be obtained noninvasively and may enable more accurate estimates of survival and effective clinical trial stratification [2]

1)
Li J, Wang J, Ding Y, Zhao J, Wang W. Prognostic biomarker SGSM1 and its correlation with immune infiltration in gliomas. BMC Cancer. 2022 Apr 28;22(1):466. doi: 10.1186/s12885-022-09548-7. PMID: 35484511.
2)
Bagley SJ, Till J, Abdalla A, Sangha HK, Yee SS, Freedman J, Black TA, Hussain J, Binder ZA, Brem S, Desai AS, O'Rourke DM, Long Q, Nabavizadeh SA, Carpenter EL. Association of plasma cell-free DNA with survival in patients with IDH-wildtype glioblastoma. Neurooncol Adv. 2021 Jan 16;3(1):vdab011. doi: 10.1093/noajnl/vdab011. PMID: 33615225; PMCID: PMC7883768.