

Supplement 1. Cox formula full model with KRAF, BRAF, and HGP

The Cox regression model with KRAS/BRAF/HGP resulted in the following formula:

$S(t) = 0.2964218 \wedge \exp(0.2728 * \text{age at resection CRLM (60, if age <60)} + (0.1416, \text{in case of male}) + (-0.1069 * \text{in case of left-sided colon cancer}) + (0.0439, \text{in case of rectal primary}) + (0.3741, \text{in case of node positive CRC}) + (-0.0038 * \text{DFI in months}) + (0.0273, \text{in case of pT3-4 CRC}) + (0.1130 * \text{number of CRLM}) + (0.0881 * \text{size of largest CRLM in centimeter}) + (0.0029 * \text{CEA in } \mu\text{g/L}) + (0.3365, \text{in case of positive resection margins}) + (0.4843, \text{in case of extrahepatic disease}) + (-0.1856, \text{in case of 5-FU systemic chemotherapy only}) + (-0.1856, \text{in case of oxaliplatin- or irinotecan-based perioperative SYS}) + (-0.3204, \text{in case of perioperative HAIP chemotherapy}) + (0.4641, \text{in case of KRAS mutant}) + (0.5221, \text{in case of BRAF mutant}) + (0.4537, \text{in case of non-dHGP})$

*Abbreviations: CEA: carcinoembryonic antigen, CRC: colorectal cancer, CRLM: colorectal liver metastases, DFI: disease-free interval, HAIP: hepatic arterial infusion pump, non-dHGP: non-desmoplastic histopathological growth pattern, SYS: systemic chemotherapy