

Cancer of Unknown Primary (CUP)

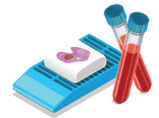


How to treat metastatic Cancer of Unknown Primary?

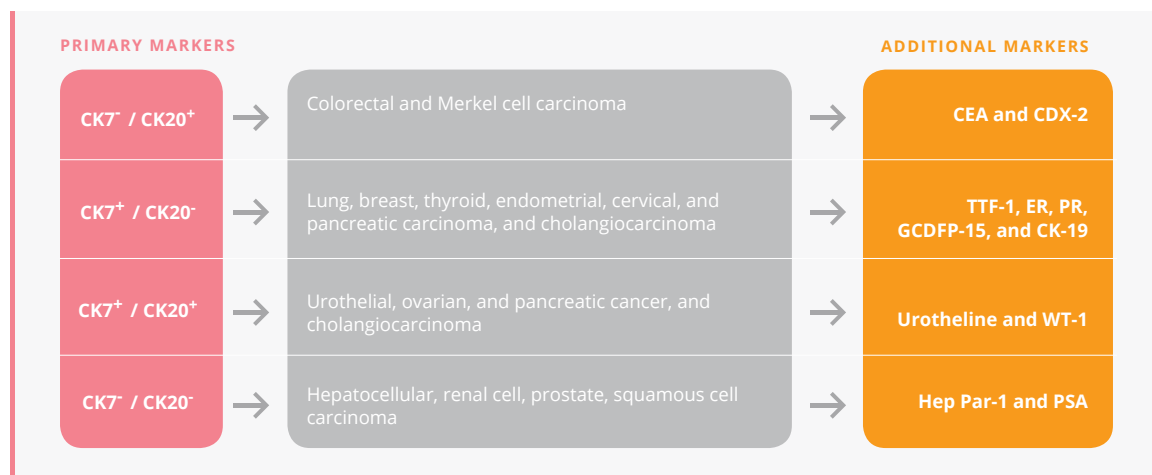
- Chemotherapies (taxane, 5-FU, platinum, gemcitabine, doxorubicin,...)
- Targeted or immunotherapies (erlotinib, gefitinib, afatinib, osimertinib, crizotinib, nivolumab, pembrolizumab, atezolizumab,...) depending on tumor profiling

HOW CAN ONCODNA BE USEFUL?

 **OncoSTRAT&GO**
by OncoDNA



- ESMO guidelines used to decipher the cancer type



- For Approved Treatments

PROTEINS



TUBB3 - over-expression

To predict poor prognosis to taxane-based therapies (docetaxel and paclitaxel).

RRM1 - over-expression

To predict poor prognosis to gemcitabine.

TS - over-expression

To predict resistance to 5-FU-based therapies (fluorouracil, capecitabine and pemetrexed).

TOP2A - over-expression

To predict good prognosis to anthracyclines-based chemotherapies (doxorubicine, epirubicine and etoposide).

TOPO1 - over-expression

To predict good prognosis to irinotecan/topotecan-based chemotherapies.

ERCC1 - over-expression

To predict poor prognosis to platinum salts-based chemotherapies (cisplatin, carboplatin and eloxatin).

MGMT - promoter methylation

To predict good prognosis to temozolomide/dacarbazine-based chemotherapies.



DNA



KRAS / NRAS / EGFR / HER2 / BRAF / ESR1 / PIK3CA / cKIT / PDGFRa / IDH1 / IDH2 / : - *extended mutations and/or amplification*
To predict poor prognosis or good prognosis to certain targeted therapies.

PROTEINS +
DNA



Tumor Burden - testing + PD-L1 & CD8 - over-expression + MSI - testing + POLE, POLD1 - mutations & copy number testing
To predict good prognosis to anti-PDL1 / anti-PD1 treatments (pembrolizumab, atezolizumab* and nivolumab*).

* : Drugs FDA approved for other indications.

WHY AND WHEN A PERSONALIZED LIQUID BIOPSY COULD BE MADE ?



• Neoadjuvant Settings

The evaluation of the response to anti-tumor therapies for solid tumors is based on the monitoring of the size of lesions and must be accurately measured in at least one dimension (longest in plane diameter is to be recorded) (RECIST criteria).

LIMITATIONS OF THIS APPROACH:

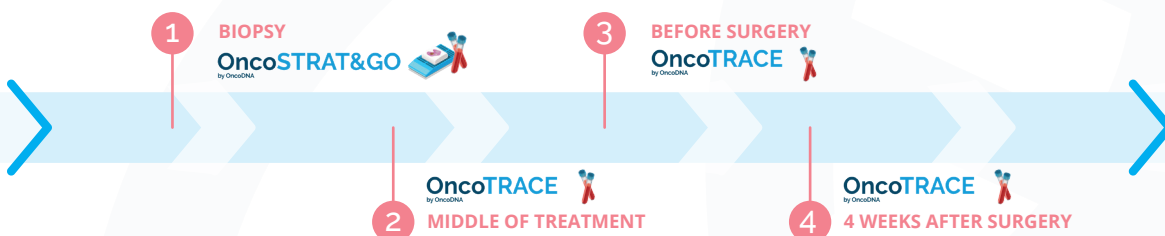
- ✗ Early evaluation after treatment start is difficult because tumor shrinkage can only be detected after several therapeutic cycles.
- ✗ Response is non-evaluative when disease is not measurable (liquid effusion, follow-up post complete tumor resection...)

OUR SUGGESTED ALTERNATIVE:

ctDNA can be used as a non-invasive tool to monitor the disease evolution during treatment. But which mutations must be followed and how many ?

Our solutions are able to:

- ✓ Predict a relapse sooner than conventional imaging technologies
- ✓ Detect resistance mutations to anticipate therapy changes
- ✓ Predict sensitivity to new therapies



• Adjuvant / Systemic settings



2 weeks before the scheduled visit with the patient.

