

# Multi-platform molecular profiling of 1,180 patients increases median overall survival and influences treatment decision in 53% of cases

David Spetzler<sup>1</sup>, Nick Xiao<sup>1</sup>, Ken Burnett<sup>1</sup>, Katie Burch<sup>1</sup>, Brian Abbott<sup>1</sup>, Kenneth Russell<sup>2</sup>, Andreas Voss<sup>2</sup>, Zoran Gatalica<sup>1</sup>, Sandeep Reddy<sup>1</sup>, Robert Leonard<sup>3</sup>, David Khayat<sup>4</sup>, John Marshall<sup>5</sup>

<sup>1</sup> Caris Life Sciences, Phoenix, AZ; <sup>2</sup> Caris Life Sciences, Basel, Switzerland; <sup>3</sup> Imperial College London, London, United Kingdom; <sup>4</sup> Groupe hospitalier universitaire Pitié-Salpêtrière - Charles Foix, Paris, France; <sup>5</sup> Georgetown Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, Washington DC

## Objectives

**Primary:** A prospective, observational study to track outcomes and determine the clinical utility of multi-platform molecular profiling (MMP) across a variety of solid tumors.

**Secondary:** Assess the impact of MMP on physicians' treatment decisions.

## Patient Eligibility

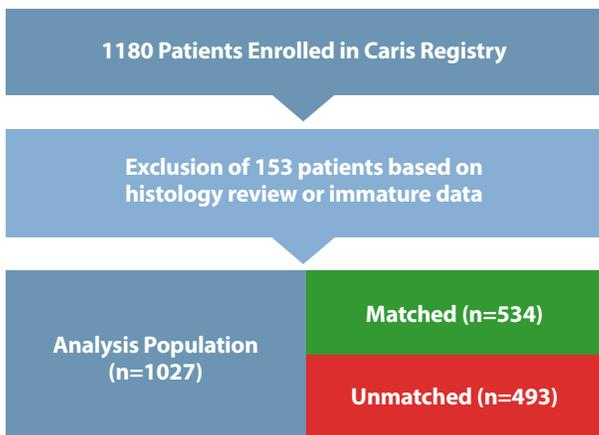
Research subject enrollment in this IRB-approved Caris Life Sciences<sup>®</sup> (Caris) Registry included:

- baseline clinical information at the time of tumor profiling
- Caris Molecular Intelligence<sup>®</sup> (CMI) tumor profiling results
- treatment received
- clinical outcomes including overall survival

## Study Schema/Participants

Demographics (race, gender, age and tumor grade) and tumor type were well balanced across the matched and unmatched cohorts.

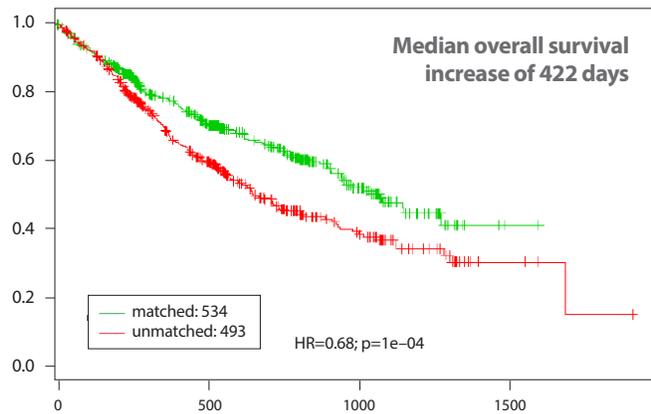
- Matched group: Patients that received one or more drugs predicted to be of benefit and no drugs predicted to be of lack of benefit.
- Unmatched group: Patients that received at least one drug predicted to be of lack of benefit or only treatments not mentioned in the CMI report.



## Key Findings

- Patients who received only treatments associated with potential benefit according to the CMI report (n=534) had a **significantly higher median overall survival (OS) by 422 days** from the time of profiling compared to those in the unmatched cohort (n=493) (median OS 1068 vs 646 days, HR = 0.68, p=0.0001).
- Patients in the **matched cohort were treated with less treatments overall after profiling** compared to those in the unmatched cohort (median 3.2 vs 4.2 therapies).

**Figure 1:** Kaplan Meier Curve of Overall Survival based on treatments administered after comprehensive tumor profiling with Caris Molecular Intelligence



- Physicians stated that the **CMI report changed their treatment choice in 53% of cases** (629 of the 1,180 patients) and that the report helped them in both treatment selection and treatment avoidance.

## Conclusions

- A 32% reduction in the risk of death was observed in patients who received only treatments associated with benefit after profiling. Median overall survival was 422 days longer in these patients.
- Multi-platform molecular profiling by CMI influenced the physician's decisions in over 50% of refractory cancer cases – helping with treatment selection and avoidance of potentially less effective treatments.
- Patients in the matched cohort received fewer treatments after profiling than those in the unmatched cohort.
- Outcome data in the Caris registry can be used to confirm the predictive value of biomarkers included in CMI tumor profiling.

Information from Abstract 254, Poster Presentation – ECC 2015.