Il contributo di Heal Italia alla Ricerca Biomedica

Manuela Ferracin

University of Bologna

Finanziato dall'Unione europea NextGenerationEU

Ministero dell'Università e della Ricerca

Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA

HEAL ITALIA

Advanced research equipment for Precision Medicine

Multiomics analyses at the single-cell resolution

Preclinical in vivo studies

Investigations on human disease pathogenesis

Chromium

Unbiased cellular discovery

Visium

Unbiased spatial discovery

Xenium

Precise single cell spatial insights

Finanziato dall'Unione europea NextGenerationEU

Ministero dell'Università e della Ricerca

Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA

HEAL ITALIA

Ecosystem for Precision Medicine

INFRASTRUCTURES

- AlmaHealthDB platform (UNIBO)
- Clinical Data Repository platform (Eng)
- ISO 27001 Computational platform (UNIBO)
- AI Sandbox environment (BI-REX)
- Swarm learning distributed AI platform (UNIVR – UNIBO – UNITV – Vet S.r.l.)

COMPUTATIONAL ALGORITHMS

- General AI frameworks (many Institutions, ClearBox-AI)
- Network analysis (Sapienza)
- Multi-omics (many Institutions)
- Digital twins (UNIBO – UNIMIB)
- Robotic surgery (Campus Bio-medico & partners)

OPEN SCIENCE

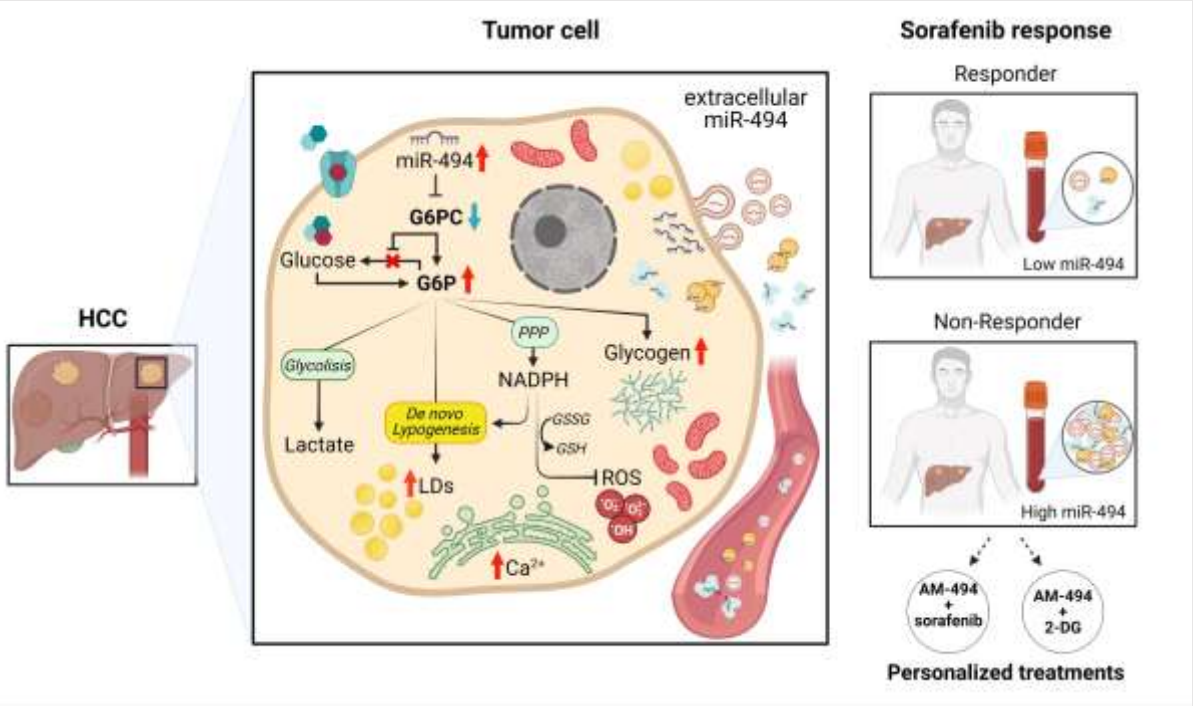
- "Precision medicine: novel methodologies in genomics, imaging, and clinical data analysis for brain and cancer research"

(BI-REX, UNIBO, UNICA, UNITV, S. Orsola)

biobank uk
Improving the health of future generations

Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA
HEAL ITALIA

Preclinical and clinical Precision Medicine

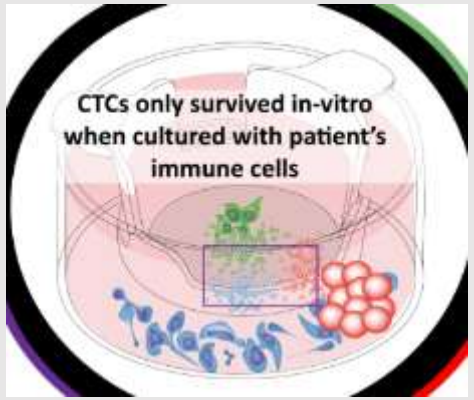


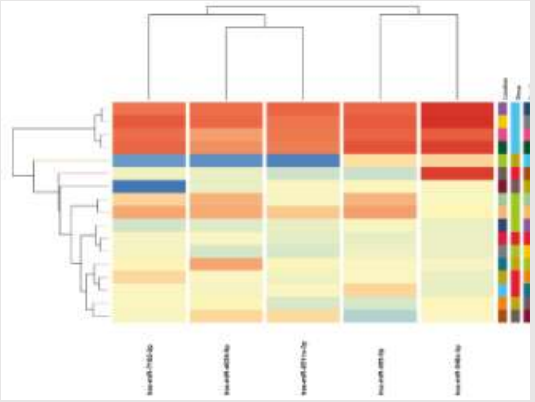
TKI response prediction in hepatocellular carcinoma

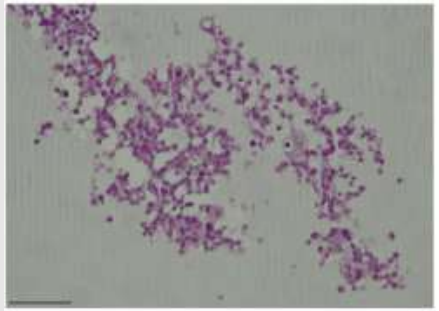
MiR-494 induces metabolic changes through G6pc targeting and modulates sorafenib response in hepatocellular carcinoma. Bergamini C, et al. J Exp Clin Cancer Res. 2023 Jun 10;42(1):145. doi: 10.1186/s13046-023-02718-w.

Circulating tumor cell crosstalk with immune system enables long term cell growth

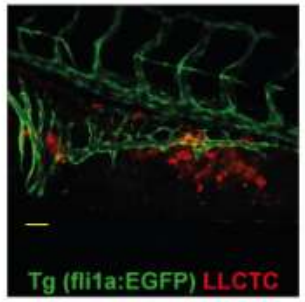
Gallerani et a., Cell Death and Disease, under revision

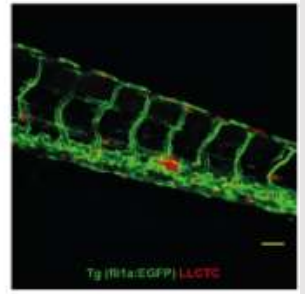






Recapitulate the histological features of the original tumors





Have different invasive characteristics

Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA
HEAL ITALIA

Preclinical and clinical Precision Medicine

ONC-OLD multicenter clinical trial

Evaluation by G8 onco-geriatric testing of the elderly patients with advanced neoplastic disease who are receiving innovative treatments (immunotherapy, combo chemo-immune, targeted therapy)

Centro	PI	Stato CE	Convenzione data sharing	Pazienti arruolati
Bologna	De Giglio	Approvato	Si	54
Modena	Bertolini	Approvato	Si	8
Parma	Leonetti	Approvato	Si	13
Ferrara	Santini	Approvato	Si	-
Ravenna	Bennati	Approvato	Si	-
IOV	Brunello	Approvato	Si	2
Campus Biomedico	Vincenzi	Approvato	Si	-

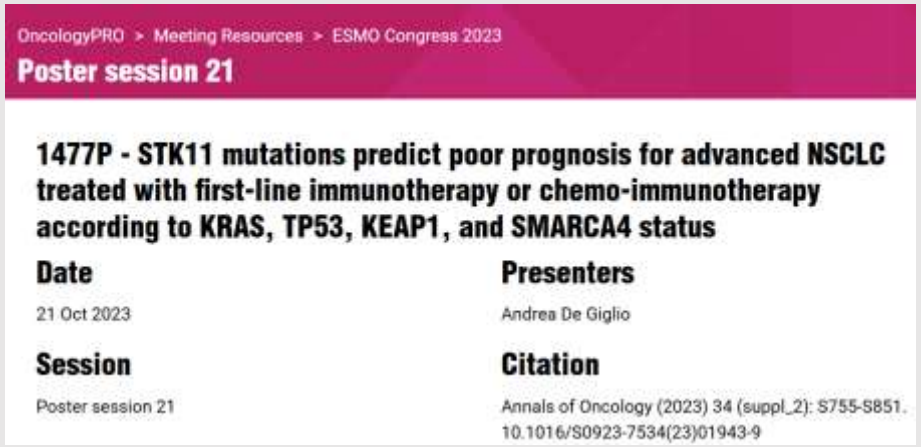
Cancer Immunology, Immunotherapy (2024) 73:246
https://doi.org/10.1007/s00262-024-03836-w

RESEARCH

Development and validation of a new tool to estimate early mortality in patients with advanced cancer treated with immunotherapy

Andrea De Giglio[1,2] · Alessandro Leonetti[3] · Francesca Comito[2] · Daria Maria Filippini[1,2] · Veronica Mollica[2] · Karim Rihawi[2] · Marianna Peroni[4] · Giulia Mazzaschi[3,4] · Ilaria Ricciotti[1] · Francesca Carosi[1] · Andrea Marchetti[1] · Matteo Rosellini[1] · Ambrogio Gagliano[1] · Valentina Favorito[1] · Elisabetta Nobili[2] · Francesco Gelsomino[2] · Barbara Melotti[2] · Paola Valeria Marchese[1] · Francesca Sperandi[2] · Alessandro Di Federico[1,2] · Sebastiano Buti[3,4] · Fabiana Perrone[3] · Francesco Massari[1,2] · Maria Abbondanza Pantaleo[1,2] · Marcello Tiseo[3,4] · Andrea Ardizzoni[1,2]

Received: 13 June 2024 / Accepted: 15 September 2024
© The Author(s) 2024



OncologyPRO > Meeting Resources > ESMO Congress 2023

Poster session 21

1477P - STK11 mutations predict poor prognosis for advanced NSCLC treated with first-line immunotherapy or chemo-immunotherapy according to KRAS, TP53, KEAP1, and SMARCA4 status

Date
21 Oct 2023

Presenters
Andrea De Giglio

Session
Poster session 21

Citation
Annals of Oncology (2023) 34 (suppl_2): S755-S851. 10.1016/S0923-7534(23)01943-9

Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA
HEAL ITALIA


HEAL ITALIA
FOUNDATION


Università
degli Studi
di Palermo


TLS


ENGINEERING


bi-rex


ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA


Università
di Catania


IRCCS
ISTITUTI FISIOTERAPICI
OSPITALIERI


IN SUPREMÆ DIGNITATIS
1343


ISTITVTO SVPERIORE DI SANITÀ


CRO
AVIANO


UNIVERSITÀ DEGLI STUDI DI VERONA


UNIVERSITÀ POLITECNICA
DELLE MARCHE


sanofi


UPMC
LIFE CHANGING MEDICINE


SIT


SAPIENZA
UNIVERSITY OF ROME


NEUROMED


Istituto Oncologico
del Mediterraneo


TOR VERGATA
UNIVERSITÀ
DEGLI STUDI
DI ROMA


UNIMORE


ISTITUTO DI RICERCHE
FARMACOLOGICHE
MARIO NEGRI · IRCCS


UNIVERSITÀ DEGLI STUDI DI MILANO
BICOCCA