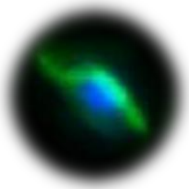
CANCER-ID
IMI project Case study

N. Manaresi, Ph.D.

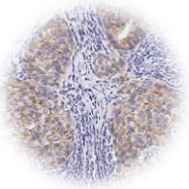
Chief Scientific Officer

21-gennaio-2020

Where we play



Cell based Liquid Biopsy – market leader



Oncology: small tissue biopsies

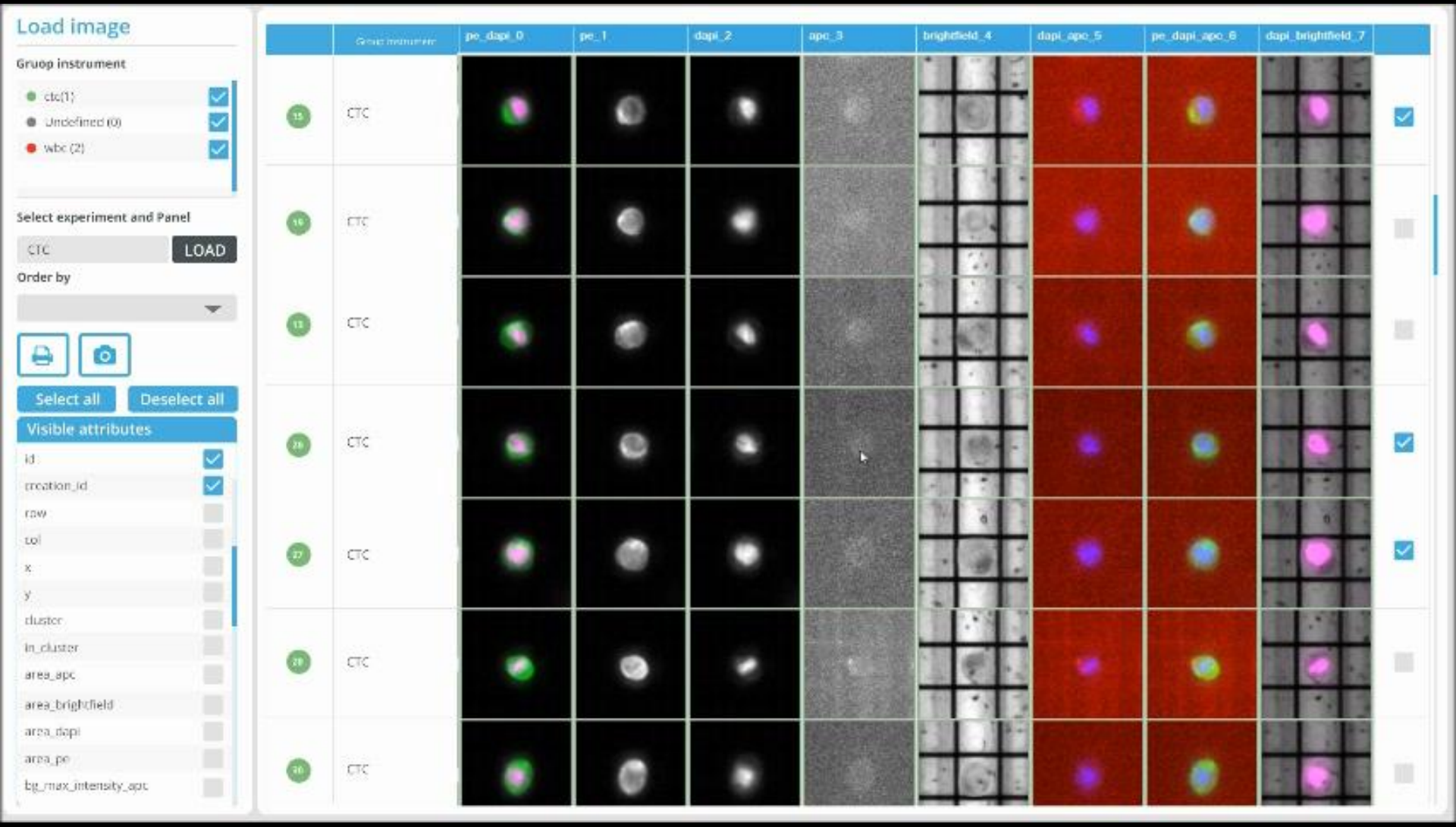
Forensic genetics

Non-invasive prenatal diagnosis

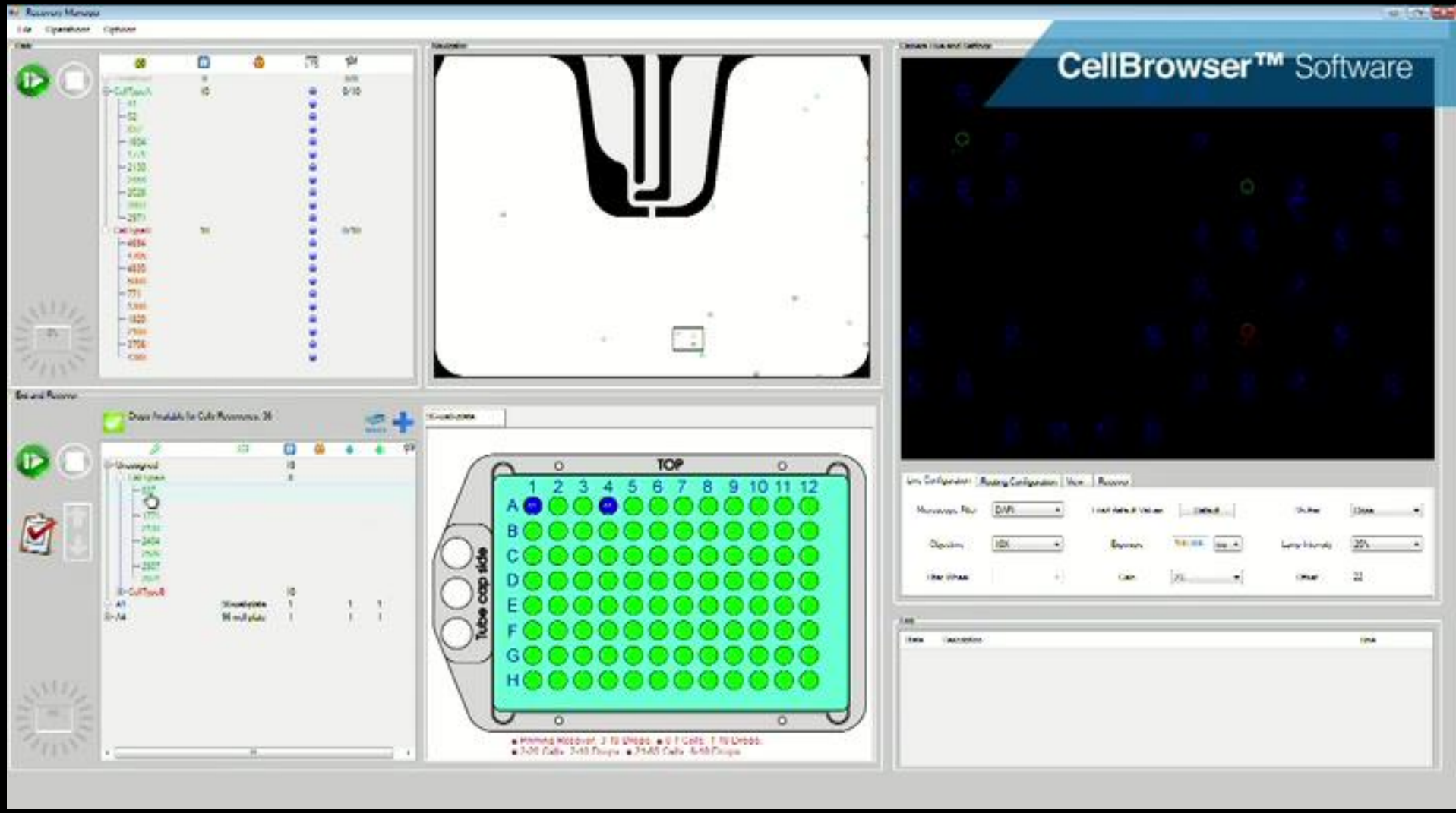
MENARINI silicon biosystems

How we play

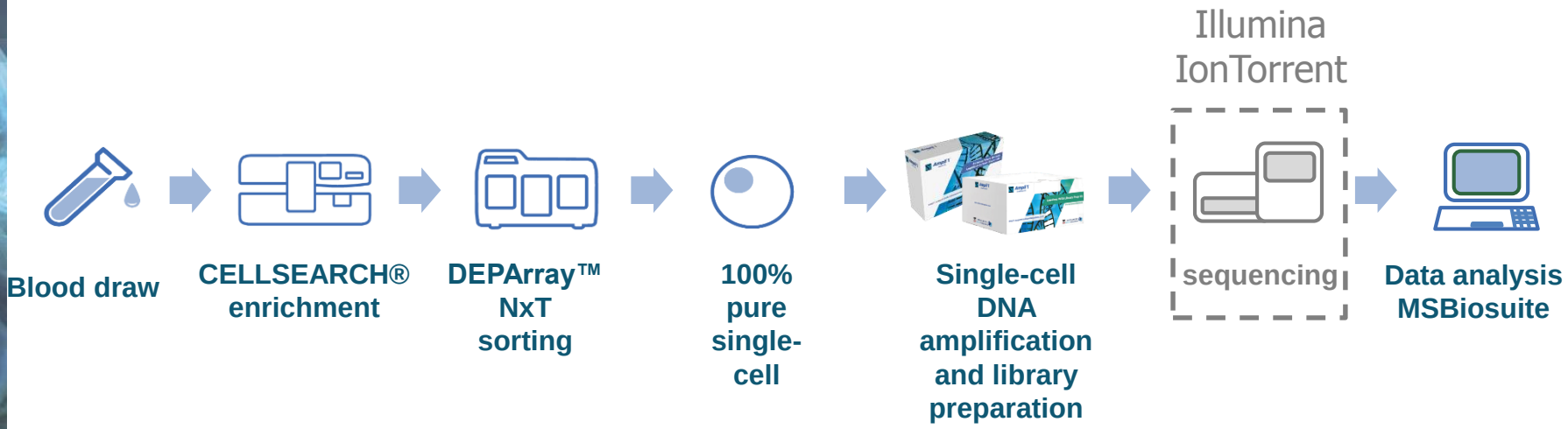
How we play


Load image
Gruop instrument
ctc(1)
Undefined (0)
wbc (2)
Select experiment and Panel
CTC
LOAD
Order by
Select all
Deselect all
Visible attributes
id
creation_id
row
col
x
y
cluster
in_cluster
area_apc
area_brightfield
area_dapi
area_pe
bg_max_intensity_apc
pe_dapi_0
pe_1
dapi_2
apc_3
brightfield_4
dapi_apc_5
pe_dapi_apc_6
dapi_brightfield_7
CTC

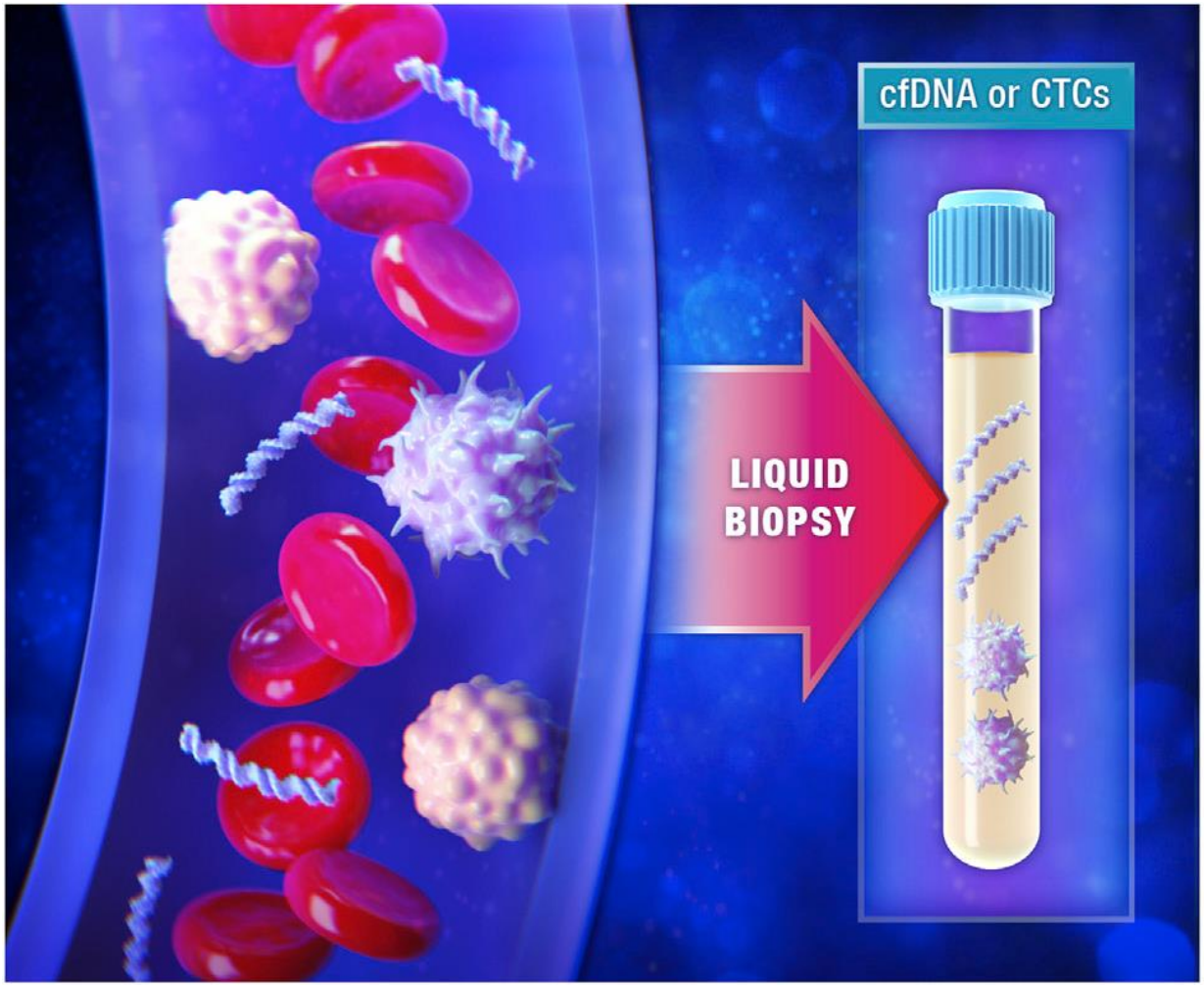
How we play


CellBrowser™ Software
TOP
1 2 3 4 5 6 7 8 9 10 11 12
A
B
C
D
E
F
G
H
Tube cap side

Liquid Biopsy Workflow: Enabling CTC Molecular Characterization



Liquid Biopsy – *the 21st century X-Ray*



DIAGNOSIS:
Genotyping cfDNA in the blood to determine the tumor profile

RESPONSE AND FOLLOW UP:
Analysis of cfDNA and CTC for real time monitoring of response to treatment

TUMOR EVOLUTION:
Emergence of molecular alterations associated with resistance to therapy

MINIMAL RESIDUAL DISEASE:
The presence of cfDNA or CTC in the circulation indicates that the disease is stll present

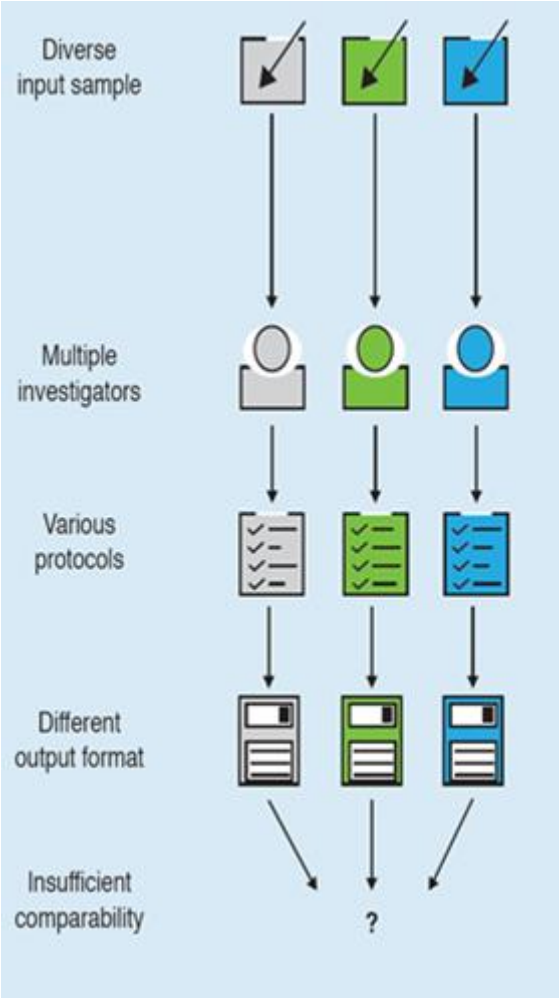
Bardelli & Pantel, 2017, Cancer Cell 31, 172-179

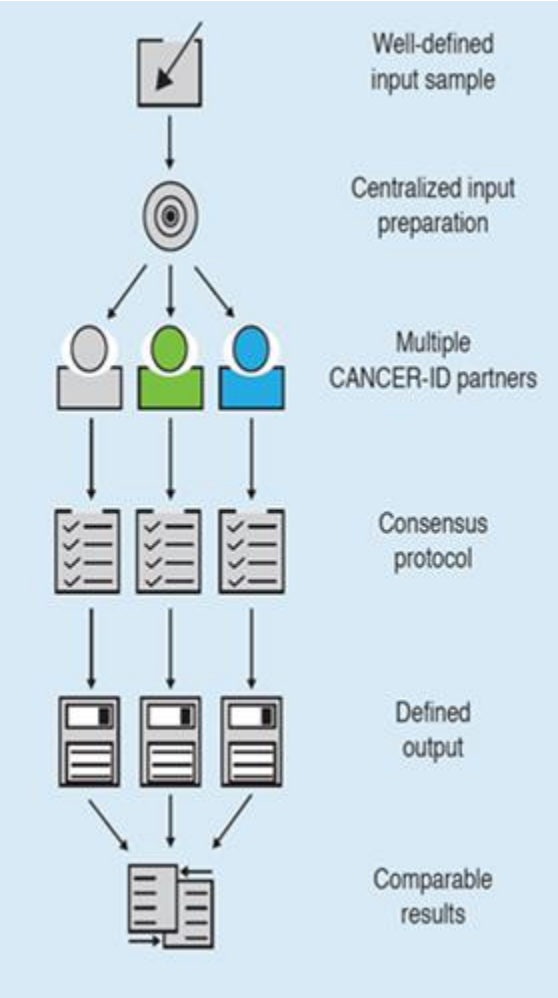
MENARINI silicon biosystems

CANCER ID

36 partners
5 years
16,7M€

Working with the same technology at different sites…





MENARINI silicon biosystems

Worldwide interactions with other stakeholders in the field

Other consortia and organizations active in Liquid Biopsy related fields. CANCER-ID fostered collaboration in the field and contact with several initiatives:

- Blood Profiling Atlas in Cancer (BloodPAC) Consortium – US-based PPP established in Oct 2016, enabling access to and harmonization of liquid biopsy data, ongoing negotiations about collaboration
  Meeting at AACR 2018 together with NIH representative
  → In preparation a White Paper on pre-analytical sample handling, joint data base infrastructure, shared data access

- SPIDIA4P (Standardisation and improvement of generic pre-analytical tools and procedures for in-vitro diagnostics) – H2020 program, development of CEN documents

NIBSC Confidence in Biological Medicines
IQNPath
JMAC 特定非営利活動法人 バイオチップコンソーシアム Japan Multiplex bio-Analysis Consortium
A.C.Camargo Cancer Center Centro Integrado de Diagnóstico, Tratamento, Ensino e Pesquisa
MENARINI silicon biosystems

CEN/TC 140/WG 3 **N 391**

CEN/TC 140/WG 3
Quality management
E-mail of Secretary:
Secretariat: DIN

CEN/TS for CT

Date of document

Expected action
Due Date

Background

Please find enclos
Specifications for pr
Part 3: Preparation
WebEx meeting in J

If you have any obj
CEN/TC 140 to prep

CEN/TC 140/WG 3 **N 397**

REPLACES: N 389

CEN/TC 140/WG 3
Quality management in the medical laboratory
E-mail of Secretary: ulrike.schroeder@din.de
Secretariat: DIN

CEN/TS for CTCs - Isolated DNA - final

Date of document 2019-02-01

Expected action Info

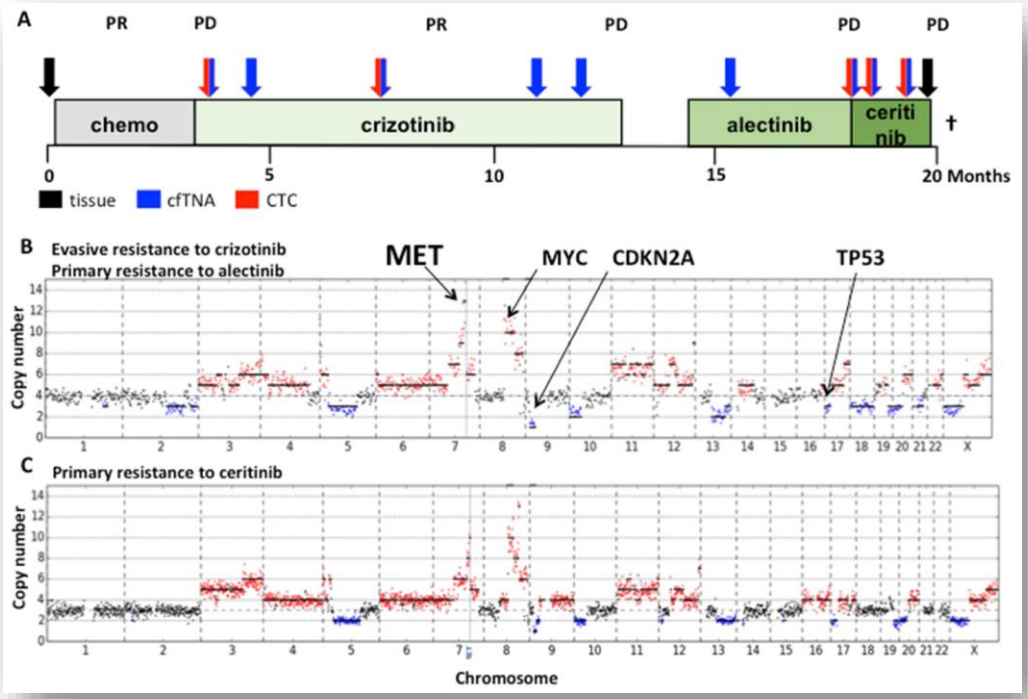
Background

Please find enclosed the final draft CEN/TS for *Molecular in vitro diagnostic examinations — Specifications for pre-examination processes for Circulating Tumor Cells (CTCs) in venous whole blood — Part 2: Isolated DNA* with changes according to the December meeting and the WebEx meeting in January. For a text comparison to N 381, please see N 398.

MENARINI silicon biosystems

MSB Liquid Biopsy workflow provided results in ALK inhibitors resistance

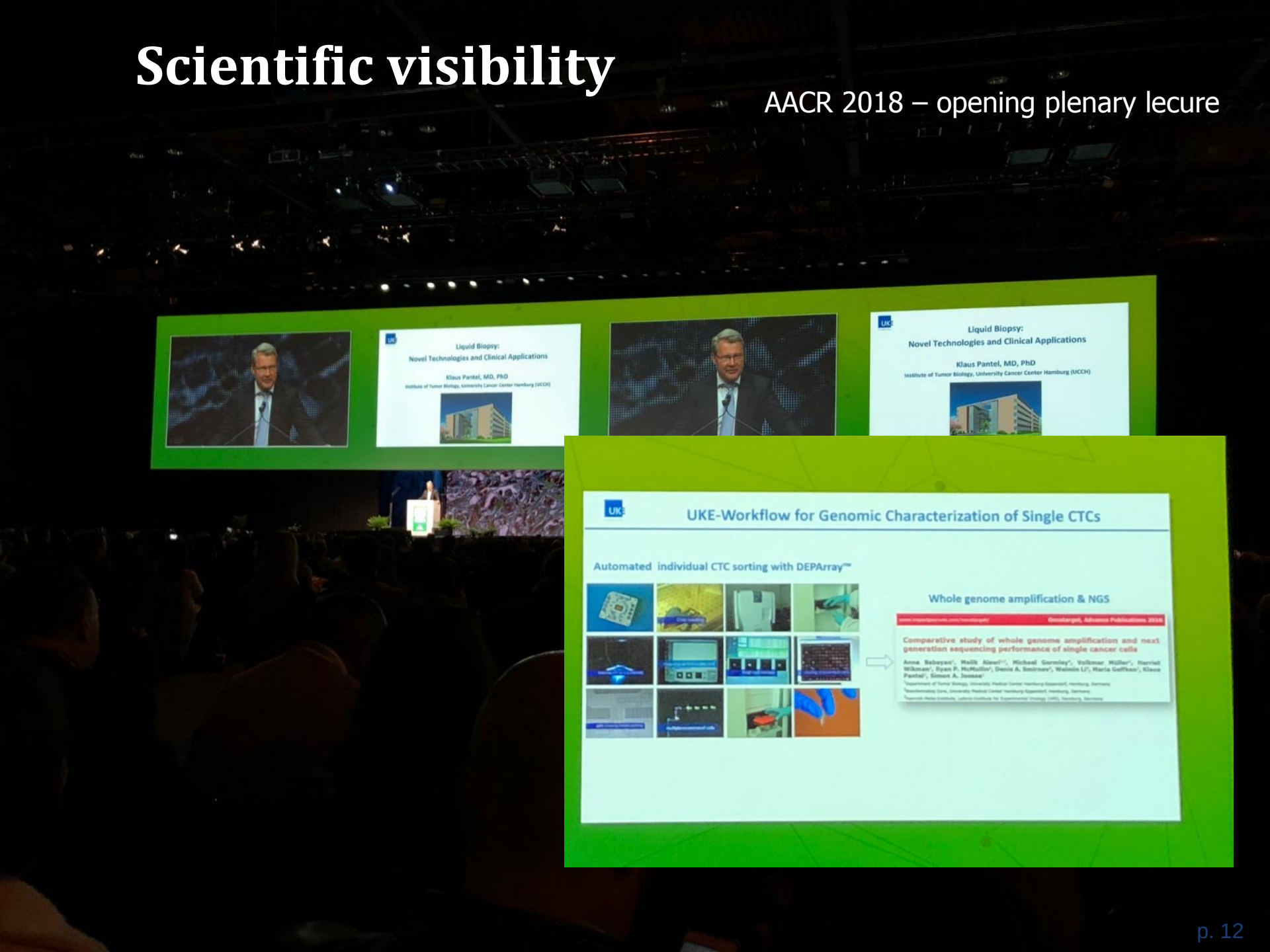
- Evasive resistance to ALK inhibitors linked to MET amplification



Berger et al. J Thorac Oncol. 2018 Sep 8.

Scientific visibility

AACR 2018 – opening plenary lecure



Building of a lasting network

THE EUROPEAN LIQUID BIOPSY SOCIETY

- Continuity to project consortium 2020 & beyond

MENARINI silicon biosystems