



**OncoDNA**<sup>®</sup>  
THE CANCER THERANOSTIC COMPANY

**European User Group Meeting**  
**OncoDEEP<sup>®</sup> Kit**

21<sup>st</sup> - 22<sup>nd</sup> October 2024

**The impact of CGP on a patient's journey, the treating oncologists view of using CGP, making use of the report and the challenges raised in the clinical setting**

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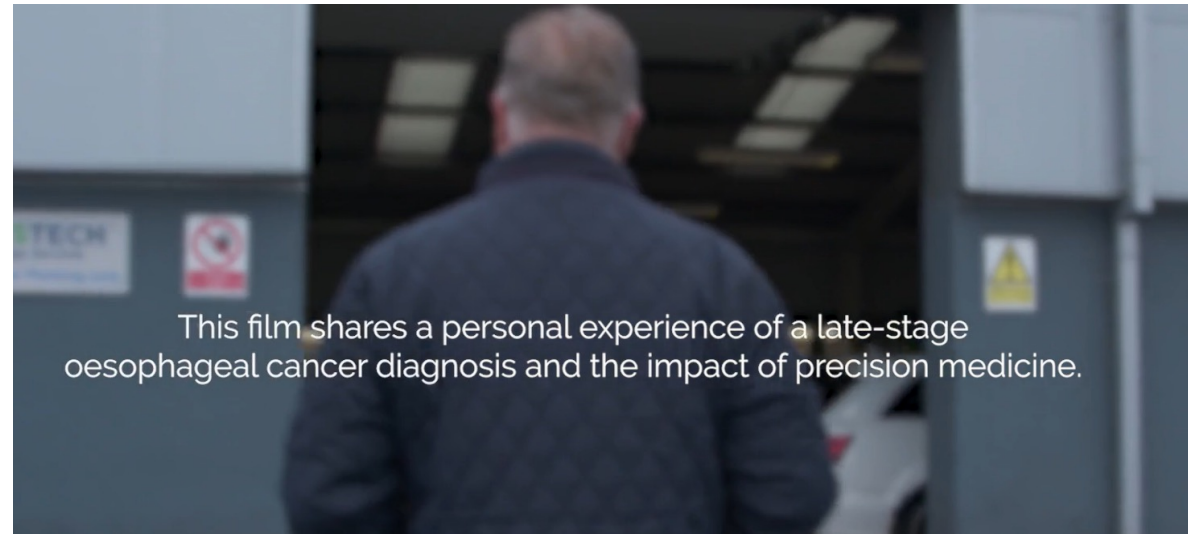
# About me...

- **Consultant Clinical Oncologist with experience of working**
- English NHS
- Scottish NHS
- Private practice e.g BUPA, Nuffield, Genesis Care etc.
- I work for health insurance company (MEDREV) as a reviewer of claims
- Offering second medical opinion with interpretation of CGP result (FURTHER).
- OncoDNA acting as their Medical Director in the UK.
  
- **Became interested in genomics as a result of**
- Recognition that “one size does not fit all”
- Treatments are increasingly about selection of the right treatment for the right patient at the right time.
- Access to these advanced treatments are very limited due to factors outside of the control of patients or treating clinicians
- How can we make it better?



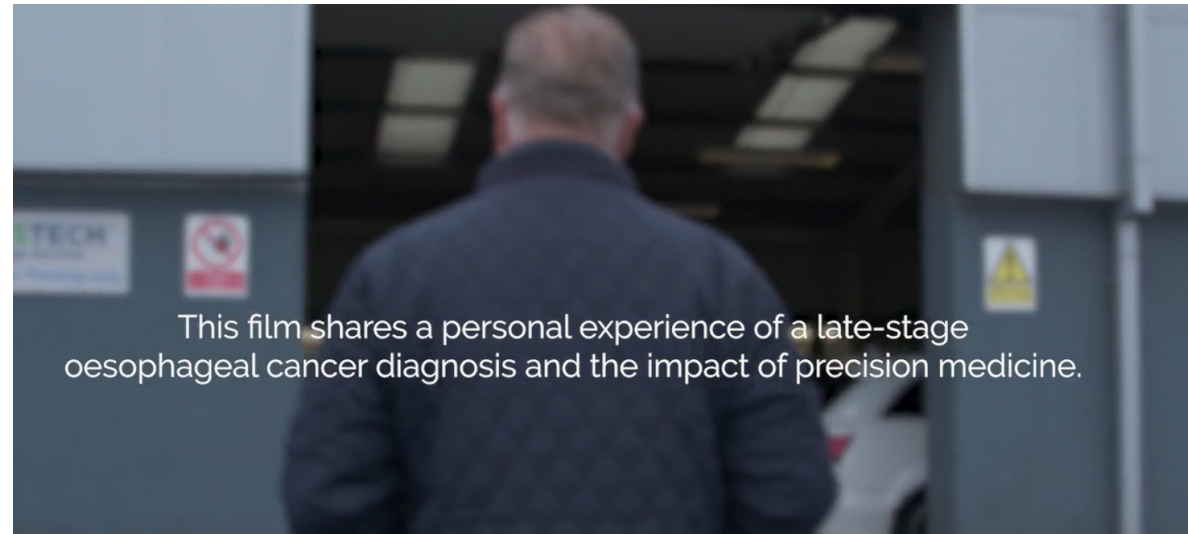
# Allow me to introduce you to one of my patients ...

- This story is of a 44-year-old patient with advanced esophageal cancer (metastatic adenocarcinoma). Nov 2021
- The man had already been told he did not meet the criteria for the standard of care pathway offered by the NHS (pMMR, Her2, PDL1)
- Sadly, he was informed that median prognosis was 12 months by the initial oncologist.
- “Doomed to end his days” with very disabling and debilitating symptoms of this 14<sup>th</sup> most common cancer
  - He turned to the private health system, which is when I met him.
  - Amongst other things we actioned during the consultation was an OncoDEEP CGP test
    - NGS + IHC tests via OncoDNA’s laboratory in Belgium.



## Allow me to introduce you to one of my patients ...

- At the point where the film ends back in 2022 Tim was responding very well to treatments.
- OncoDEEP CGP had revealed a PDL1 mutation, making the patient eligible for pembrolizumab.
- The insurer evidenced by OncoDEEP (PDL1 CPS= 20) funded treatment providing Tim with chemo and immunotherapy (pembrolizumab). Initially his treatments were very effective with partial and then complete responses.
- He discontinued the use of morphine for pain, no longer had a feeding tube, and was able to eat again, regaining weight
- Importantly he secured some critical extra time with friends and family as well as taking care of business interests.
- The impact of pembrolizumab had been very positive.



# What is the challenge for oncologists when ordering genomic tests?

- In the NHS tests can only be ordered if the patient meets the criteria in the National Test Directory (what, when, why, where, how).
- In the private sector the test can only be ordered if the insurer will pay
  - In both cases this ‘making the case for the test’ or ‘submitting forms’ is a lot of work for the busy clinician
- Often the oncologist is in ‘the dark’ as to when to expect the results and must ‘press on’ with treatment anyway.
- Many genomic reports are complex to interpret and do not give a summary
- OncoDeep reports are now much shorter with clinically relevant summaries – patient’s do read the reports too.
- Finally, the chances of CGP finding treatment options when the patients have exhausted multi lines are low (about 5-10% )
- If you do find a mutation (5-10%), you worry if you can access the drugs
  - Via the NHS?
  - Will the health insurer fund?
  - Is there a clinical trial open and recruiting?
- Its all about managing the patient's expectations at a time when they are very vulnerable and anxious.
  - Many patients are just too weak to travel long distances to participate in clinical trials

Patient Name: Cancer Type: Patient ID: Sample ID: Patient Birthdate: Validated on:  
 Ovarian cancer 20210412-2 DEEPVGB7 - Apr, 23 2021

### OncoDEEP Analysis Report

**GENERAL INFORMATION**

Birthdate:	-	Sex:	Female	Medical Doctor:	Mehdy Deep
Pathologist:	BENIUSA Gabriela MD	Tumor Cell:	100.0%	Biopsy Date:	2020
Biopsy Site:	-	Primary Tumor Site:	Ovary	Cancer Type:	Ovarian cancer

Clinical Diagnosis: /  
Histological Diagnosis: /

**REPORT RESULT SUMMARY**

**Drugs**

- 11 with potential clinical benefit
- 1 with lack of clinical benefit
- 0 associated with toxicity

**Variants**

- 3 Pathogenic
- 3 Likely Pathogenic
- 31 Variants of Uncertain Significance (VUS)

### IDENTIFIED BIOMARKERS FOR THERAPIES RESPONSE

**Variants**

Biomarker	Result	VAF/CM	Biological Impact	Therapeutic Impact
BRCA1	p.W1782*	85.9%	Pathogenic	Tier IA
BRCA1	CNV.LD65	0	Pathogenic	Tier IA
MGA	DEL	68.9%	Likely Pathogenic	Tier II
RB1	LDH	1	Likely Pathogenic	Tier II
TP53	p.Y220C	77.9%	Pathogenic	Tier IIC
TP53	LDH	1	Likely Pathogenic	Tier IIC

**Other Biomarkers**

Biomarker	Result	Scoring
HRD	Positive	-
MG	Stable	-
TMB	High	13.42 Mut/Mb

\* This table shows all pathogenic and likely pathogenic variants. Details of variants of unknown significance can be accessed through OncoSHARE platform.  
 \* Analysis has detected a mutation in BRCA1, RB1, TP53. Mutations in those genes may be somatic (present only on cancer cells) or inherited. As tumour-only sequencing cannot distinguish between somatic and inherited mutations, consideration should be given to referral for testing for an inherited mutation.

# Summary

- In my view the patient case I have shown you illustrates the relevance of precision medicine in cancer treatment strategies.
- Sadly, Tim is now 3 years into his diagnosis and disease is now refractory, but he has survived longer than 3x longer than expected but there are no curative options.
- Integrating OncoDEEP technology and testing into laboratories locally and tissue does not have to be sent to Belgium
  - In this patient case alongside OncoDEEP the IHC provided extra information
  - Having the possibility to perform more than one test is of course important (quicker, better and less tissue needed)
  - Consideration needs to be given regarding testing on different parts of a patient tumor because of tissue heterogeneity (eg PDL1)
- During the last two years I have observed the National Test Directory providing access to more genomic testing in the context of the NHS- this is driven by pharmaceutical companies and newer drugs approved.
  - Insurance companies also reimburse genomic tests and will fund drugs in response to the findings.
- We need to work together to support oncologists to prescribe genomic tests
  - More work is needed:
    - To empower patients to 'ask' about genomic tests (Why test)
    - To build the confidence of the Nursing community to 'talk about genomics' (What and How to test)
    - To create stronger connections with clinical scientists, drug companies and others (Where are the newer treatments)
  - **We will only really increase the use of genomic testing if we collaborate across the professions in meetings like this one.**

## Contact details:

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