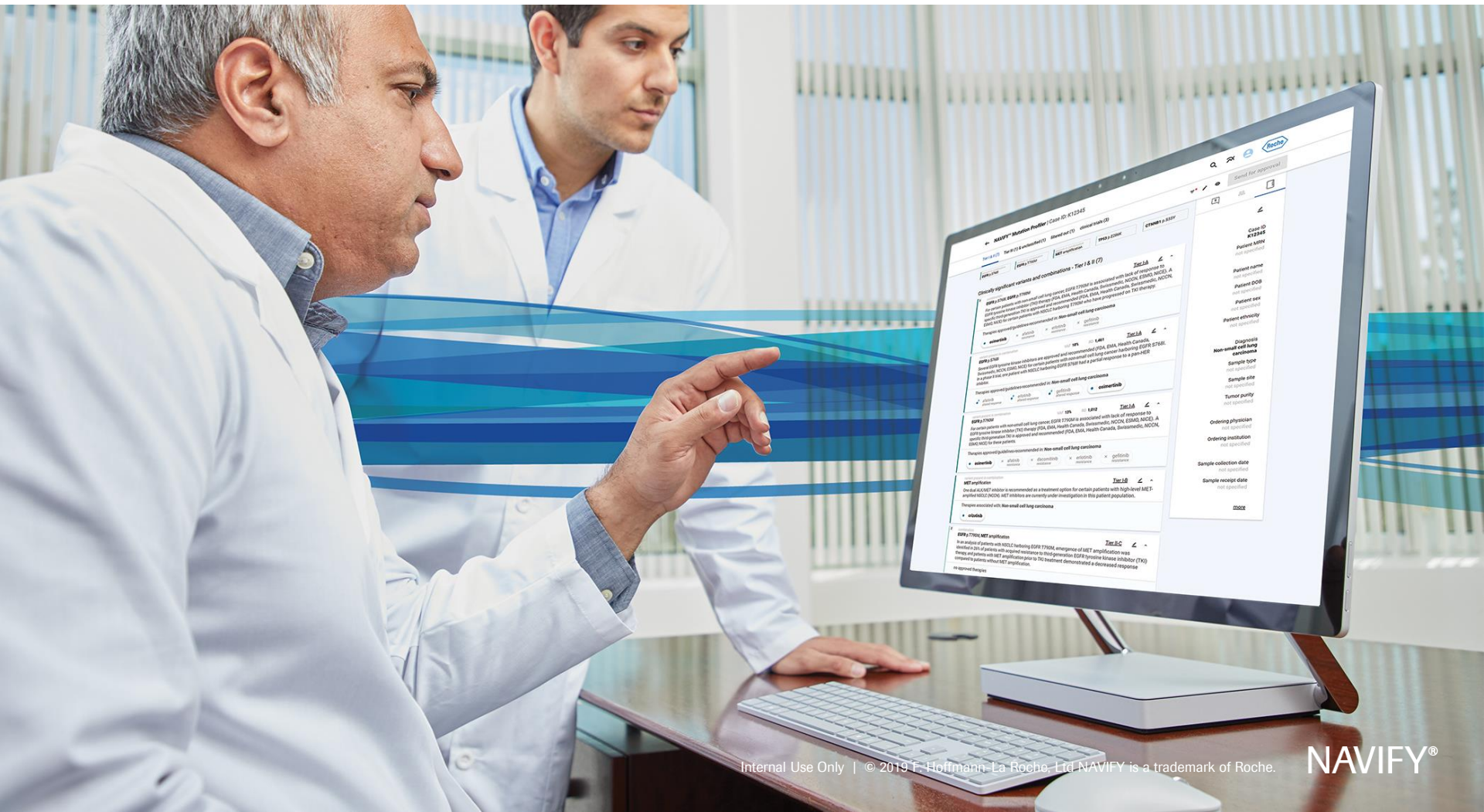




NAVIFY® Mutation Profiler

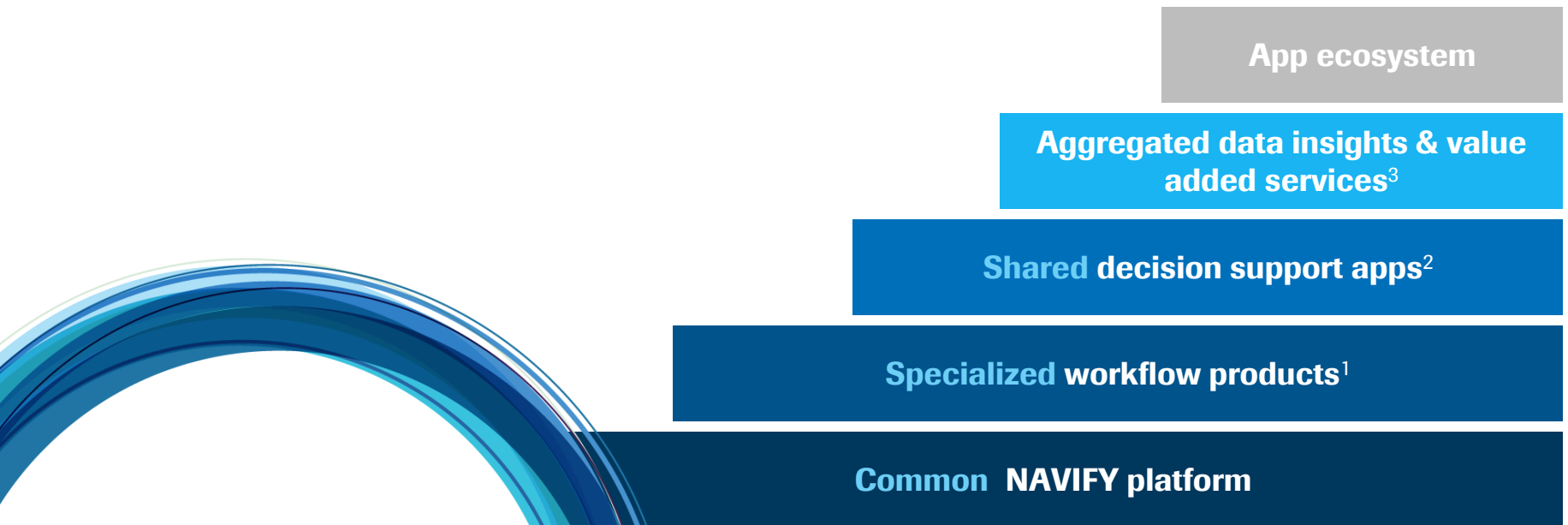
The power to do more





Our NAVIFY brand

A growing portfolio of decision support solutions



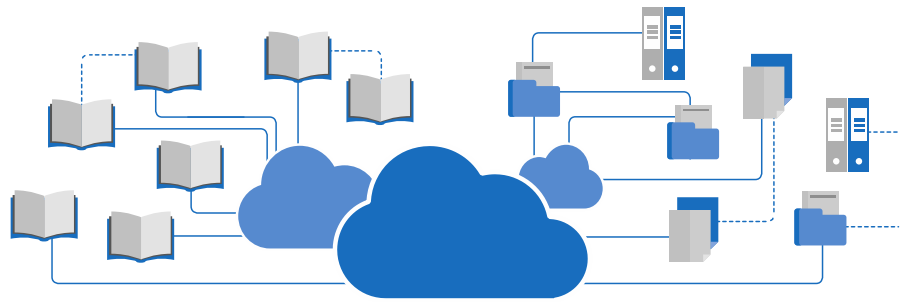
1 Workflow products, e.g. Tumor Board, **Mutation Profiler**.

2 Clinical decision support apps, e.g. Publication Search, **Clinical Trial Matcher, Therapy Matcher**

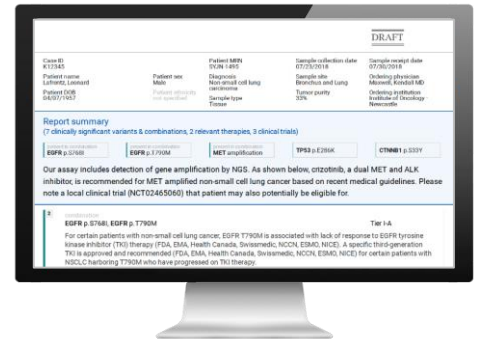
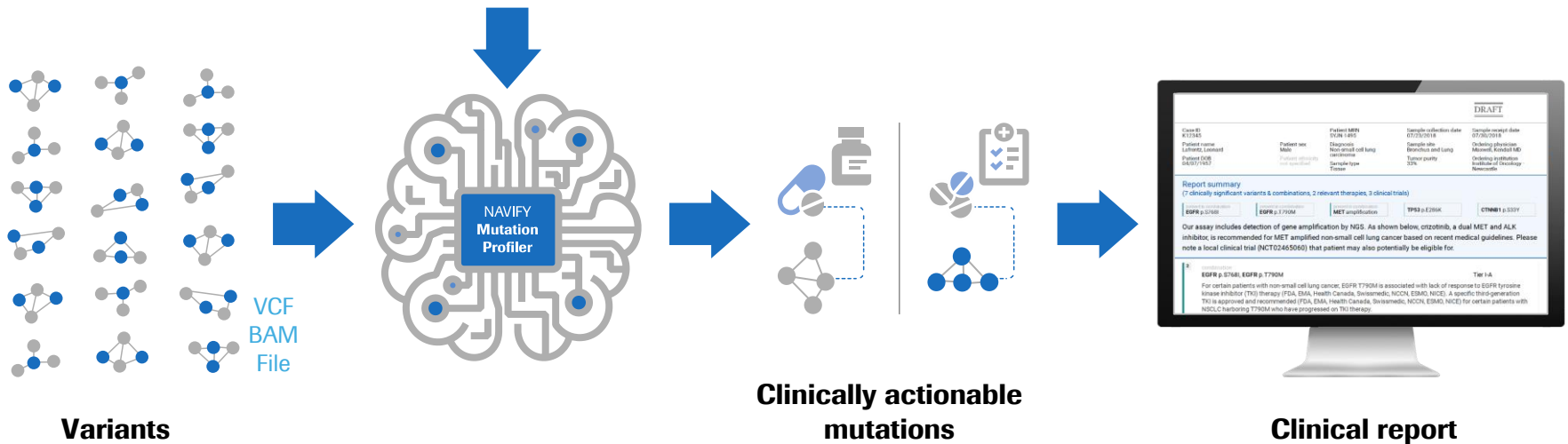
3 Aggregated data sets and Insights as a Service. Strong feedback loop to decision support apps from aggregated data

NAVIFY Mutation Profiler

Precision diagnostics for oncology



Highly curated evidence based knowledge base



How many data points?

Highly curated evidence-based knowledge base

By Version 1.1:

- 8 tumor types will be curated:
lung, colorectal, breast, melanoma, bladder, prostate, head and neck, and gastric
- A single profile corresponds to a single variant or variant combinations in a specific cancer context
- In terms of total variants, we estimate we will have curation for about **20,000 variants**
- In terms of variants, we estimate that approximately **165,000 profiles** will be annotated by the time of release



Breast cancer



Colorectal cancer



Melanoma



Lung cancer



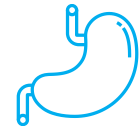
Bladder cancer



Prostate cancer



Head and neck cancer



Gastric cancer

268+
Genes

20,000+
Unique Variants

165,000+
Molecular profiles

Clinical report

Simple informative report for Oncologist to guide patient treatment options

Clinical report

Custom logo

Number of findings

Case-specific executive summary

Actionable variant information

Front page shows clinically significant variants and interactions, relevant therapies and clinical trails

DRAFT

Case ID K12345	Patient MRN SYJN-1495	Sample collection date 07/23/2018	Sample receipt date 07/30/2018
Patient name Lafrentz, Leonard	Patient sex Male	Diagnosis Non-small cell lung carcinoma	Sample site Bronchus and Lung
Patient DOB 04/07/1957	Patient ethnicity not specified	Tumor type Tissue	Tumor purity 33%
Ordering physician Maxwell, Kendall MD			
Ordering institution Institute of Oncology - Newcastle			

Report summary
(7 clinically significant variants & combinations, 2 relevant therapies, 3 clinical trials)

present in combination
EGFR p.S768I
present in combination
EGFR p.T790M
present in combination
MET amplification
TP53 p.E286K
CTNNB1 p.S33Y

Our assay includes detection of gene amplification by NGS. As shown below, crizotinib, a dual MET and ALK inhibitor, is recommended for MET amplified non-small cell lung cancer based on recent medical guidelines. Please note a local clinical trial (NCT02465060) that patient may also potentially be eligible for.

2 combination
EGFR p.S768I, EGFR p.T790M Tier I-A

For certain patients with non-small cell lung cancer, EGFR T790M is associated with lack of response to EGFR tyrosine kinase inhibitor (TKI) therapy (FDA, EMA, Health Canada, Swissmedic, NCCN, ESMO, NICE). A specific third-generation TKI is approved and recommended (FDA, EMA, Health Canada, Swissmedic, NCCN, ESMO, NICE) for certain patients with NSCLC harboring T790M who have progressed on TKI therapy.

Therapies approved/guidelines-recommended in: **Non-small cell lung carcinoma**

osimertinib
 afatinib
resistance
 erlotinib
resistance
 gefitinib
resistance

variant present in combination
EGFR p.S768I Tier I-A

Several EGFR tyrosine kinase inhibitors are approved and recommended (FDA, EMA, Health Canada, Swissmedic, NCCN, ESMO, NICE) for certain patients with non-small cell lung cancer harboring EGFR S768I. In a phase II trial, one patient with NSCLC harboring EGFR S768I had a partial response to a pan-HER inhibitor.

Therapies approved/guidelines-recommended in: **Non-small cell lung carcinoma**

afatinib
altered response
 erlotinib
altered response
 gefitinib
altered response
 osimertinib

variant present in combination
EGFR p.T790M Tier I-A

For certain patients with non-small cell lung cancer, EGFR T790M is associated with lack of response to EGFR tyrosine kinase inhibitor (TKI) therapy (FDA, EMA, Health Canada, Swissmedic, NCCN, ESMO, NICE). A specific third-generation TKI is approved and recommended (FDA, EMA, Health Canada, Swissmedic, NCCN, ESMO, NICE) for these patients.

Therapies approved/guidelines-recommended in: **Non-small cell lung carcinoma**

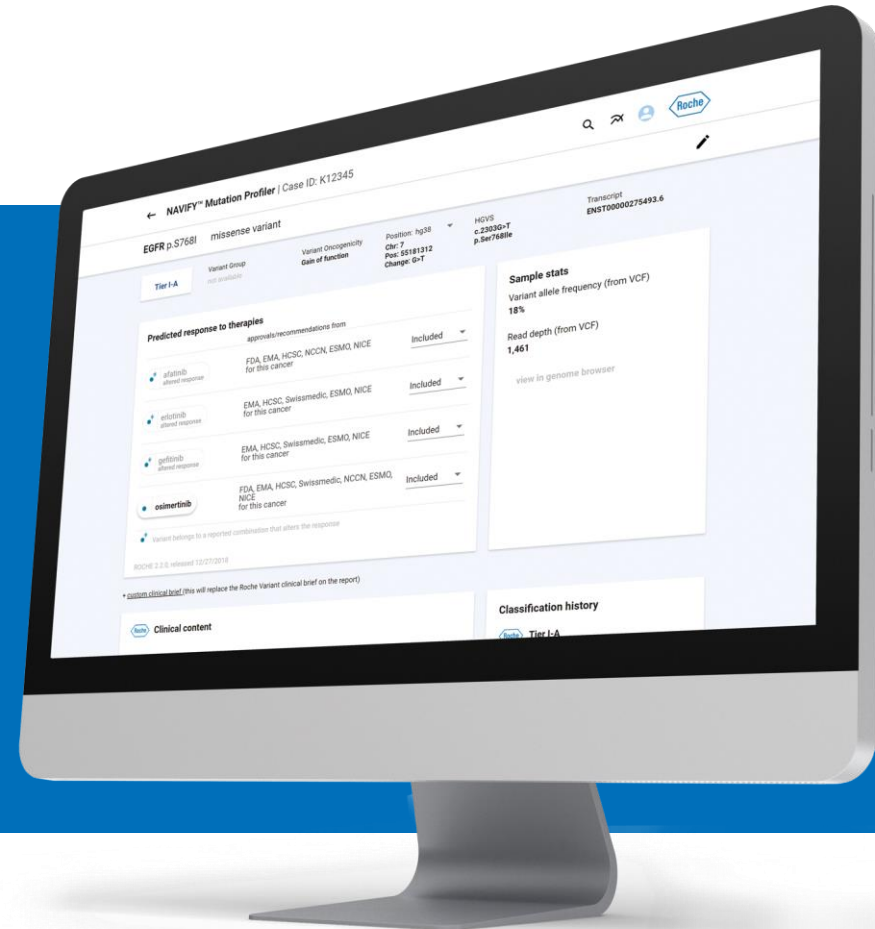
osimertinib
 afatinib
resistance
 dacomitinib
resistance
 erlotinib
resistance
 gefitinib
resistance

Patient Name: Lafrentz, L. Diagnosis: Non-small cell.
Case ID: K12345 Report date: 08/29/2019 1/9

Interest in Partnering?



Please contact:
Gerrit.Schramm@Roche.com



Doing now what patients need next