

Cancer Vaccines Are Becoming *Personal*

MEDICINE IS LEARNING TO TREAT THE TUMOUR,
NOT MERELY THE DISEASE.

A new generation of mRNA therapies is designed
for you—based on the unique mutations in your
tumour. The era of one-size-fits-all cancer
treatment is ending.



THE FUTURE OF MEDICINE

One person.
One tumour.
One medicine designed
to fight what is uniquely theirs.

The Tumour May Help Design Its Own Treatment

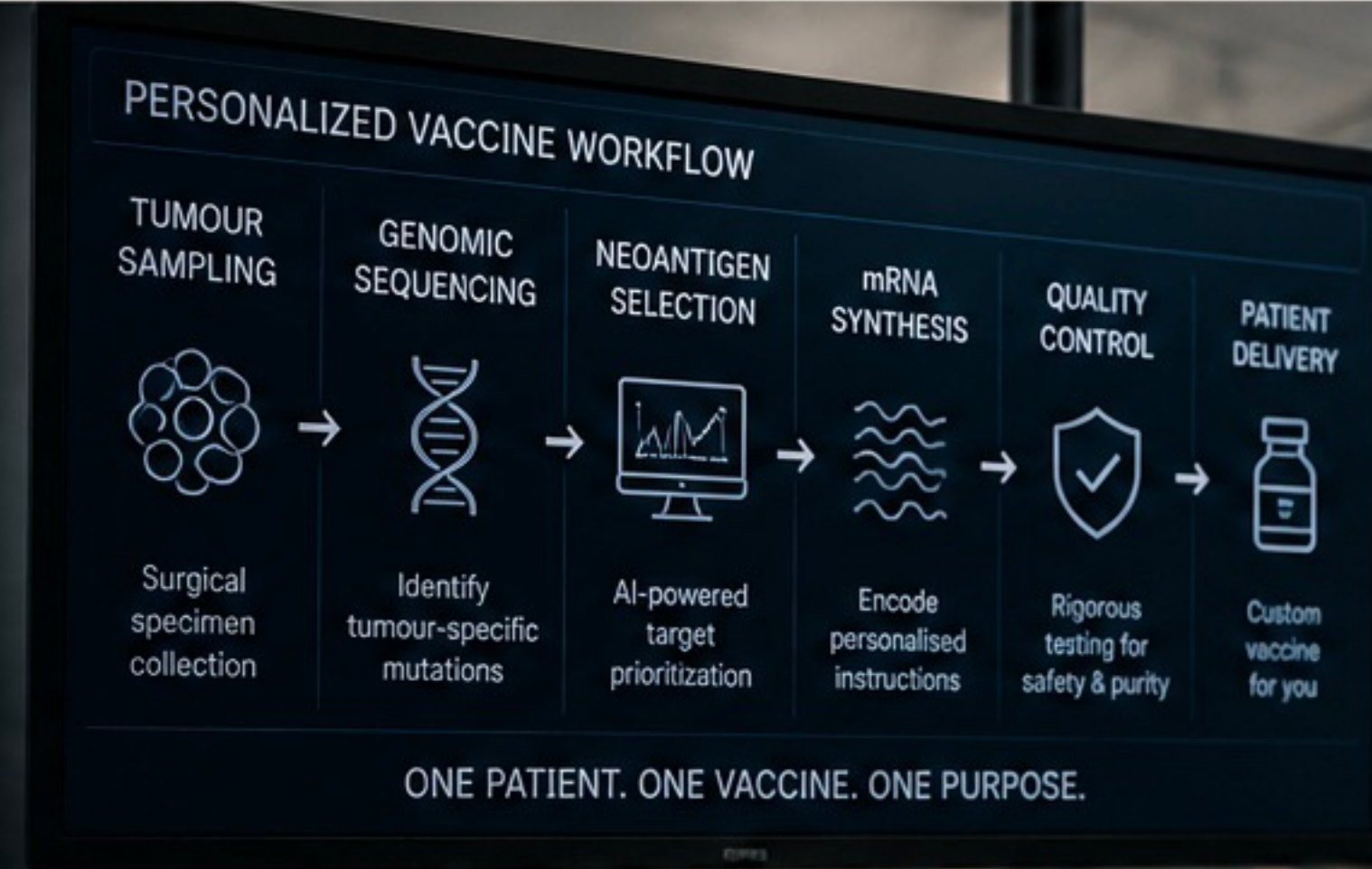
Advanced sequencing decodes the unique mutations in each patient's tumour.

Computational analysis identifies neoantigens—personal molecular targets—laying the blueprint for a vaccine made just for them.



A Vaccine Made After the Diagnosis

Each tumour is unique. From sequencing to synthesis, a personalised mRNA vaccine is engineered just for you—turning your tumour’s blueprint into immune instruction.



Evidence Has Crossed an Important *Threshold.*

Moderna and Merck report their Phase III melanoma trial met its primary and key secondary endpoints—outperforming Keytruda alone in preventing recurrence and distant metastasis.



**1,137
PATIENTS**

Resected stage
IIB–IV melanoma



**SIGNIFICANT
IMPROVEMENT**

in recurrence-free
survival



**GLOBAL
PHASE III TRIAL**

INTerpath-001
study

PHASE III INTerpath-001 TRIAL

High-risk resected melanoma

RECURRENCE-FREE SURVIVAL

Statistically significant
and clinically meaningful
improvement vs.
Keytruda alone



DISTANT-METASTASIS-FREE SURVIVAL

Statistically significant
and clinically meaningful
improvement vs.
Keytruda alone



No new safety concerns
identified in the announcement.

PHASE IIb 5-YEAR FOLLOW-UP (CONTEXT ONLY)

49%

reduction in risk of
recurrence or death

59%

reduction in risk of
distant metastasis or death

Exploratory overall survival trend encouraging;
not statistically definitive.

Source: Moderna & Merck, 19 August 2026

Detailed data pending full presentation

Innovation Is Meaningless If Access *Remains Unequal.*

Personalised cancer vaccines require advanced infrastructure, time, and cost. Without equitable systems, the medicine of the future risks deepening the inequalities of today.



**GENOMIC
SEQUENCING**
Expensive and
not universally
available



**BESPOKE
MANUFACTURING**
Complex supply
chains and limited
capacity



TIME IS CRITICAL
Delays can affect
treatment
outcomes



**RISK OF GREATER
INEQUALITY**
Who can afford it
may live—others
may not

THE ACCESS EQUATION



INFRASTRUCTURE GAP
Sequencing labs, cold chains,
and bioinformatics capacity
are unevenly distributed.



COST BARRIER
High costs may limit access
to those with insurance or
significant means.



GLOBAL DIVIDE
High-income countries
move ahead, while others
risk being left behind.



ETHICAL IMPERATIVE
The future of oncology must
be measured not just by
innovation, but by inclusion.

**Precision medicine must be paired
with a promise of justice.**

From Data to Dose: *The New Precision Production.*

Personalised cancer vaccines are more than molecules—they are advanced manufacturing systems. Speed, accuracy, and scale will determine whether promise becomes real-world impact.



1. TUMOUR COLLECTION

Surgical specimen and normal tissue



2. SEQUENCING

High-throughput genomic profiling



3. NEOANTIGEN SELECTION

AI-driven analysis identifies targets



4. mRNA SYNTHESIS

Custom instructions for each patient



5. QUALITY CONTROL

Testing, validation, and release



6. DELIVERY

Personalised vaccine ready for treatment

THE MANUFACTURING CHALLENGE



TIME-SENSITIVE

From surgery to vaccine delivery in weeks, not months.



PRECISION CRITICAL

Every step must be accurate for each individual patient.



SCALING COMPLEXITY

Industrialising personalisation without sacrificing quality.



QUALITY & SAFETY

Rigorous testing ensures efficacy and patient safety.

The future of oncology depends not only on discovery, but on delivery.

The Person Can Become Part of the *Design Brief*.

Medicine is moving from populations towards persons—using the unique biology of each tumour to design treatments, one person at a time.



BIOLOGICAL UNIQUENESS

Every tumour carries
its own mutations,
its own story.



COMPUTATIONAL INTELLIGENCE

Data and algorithms
translate complexity
into opportunity.



PRECISION THERAPEUTICS

Custom vaccines
teach the immune
system with intent.



HUMAN IMPACT

Better outcomes
mean more life,
more possibility.



The future of oncology will be measured not
only by scientific breakthroughs, but by whether
they reach every person who needs them.

ONE TUMOUR.
ONE PERSON.
ONE TREATMENT
DESIGNED WITH PURPOSE.

TUMOUR PROFILE



NEOANTIGEN MAP



PERSONALIZED
mRNA VACCINE



IMMUNE RESPONSE ACTIVATED



TARGET:
CANCER CELLS



“Can we personalise medicine
without personalising *access*
to survival?”