How to win in the evolving early-stage NSCLC landscape

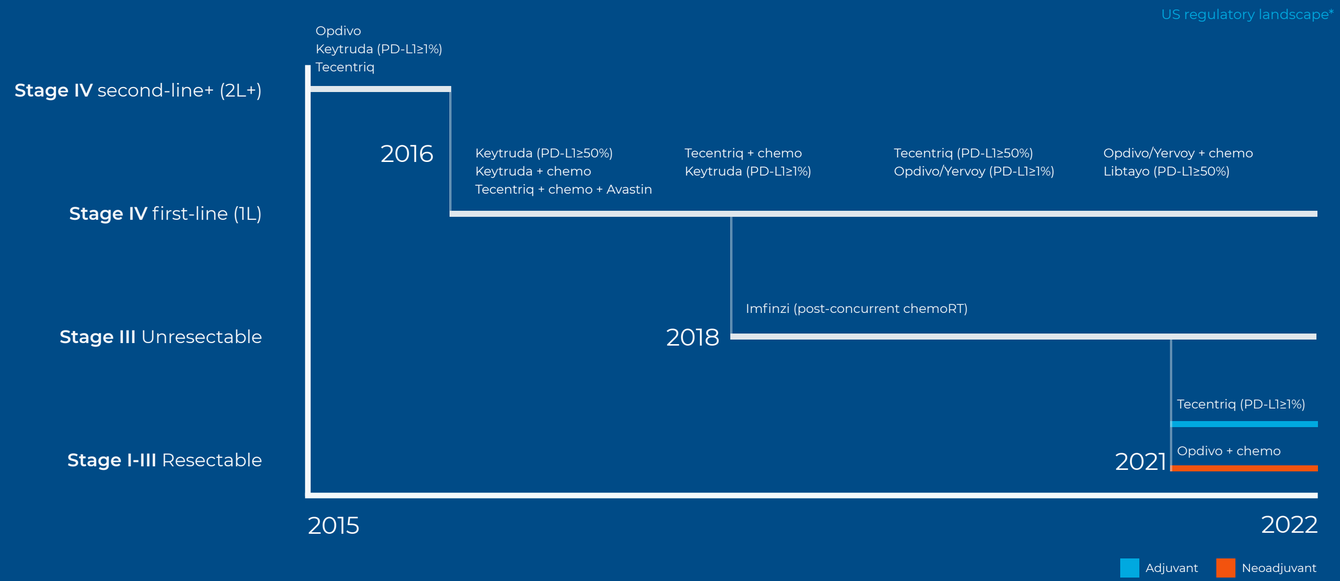
Cerner Enviza
an Oracle company

Strategic considerations to successfully adapt to the rapidly changing Non-Small Cell Lung Cancer (NSCLC) global market following the introduction of checkpoint inhibitors in resectable disease (non-driver)

- Featuring referenced insights (2022) from *CancerMPact*® syndicated solutions
  - Patient Metrics
  - Treatment Architecture
  - Future Trends & Insights
  - Cancer Landscape

Checkpoint inhibitors (CPI) seek new horizons in resectable NSCLC (non-driver)

Following the clinical and commercial success of the anti-PD-(L)1 class in the unresectable and metastatic settings, immunotherapy (IO) is moving to early-stage disease with the aim of improving resectability and reducing post-surgical recurrence [2]



Adoption in the resectable setting

When success in metastatic/ unresectable setting is combined with an unmet need, it results in a high anticipated adoption rate.

Data derived from CancerMPact® modules:

[2] Treatment Architecture (2022)

UP TO

75%

of patients will experience recurrence following surgery

Adoption in the resectable setting will be high due to high unmet need for better treatments

Sasaki et al. Oncol Lett. (2014)

Trial landscape

*All analysis are current as of October 25, 2022

Limited differentiation

There are multiple studies investigating the same treatment intervention approach

Crowded competitive landscape

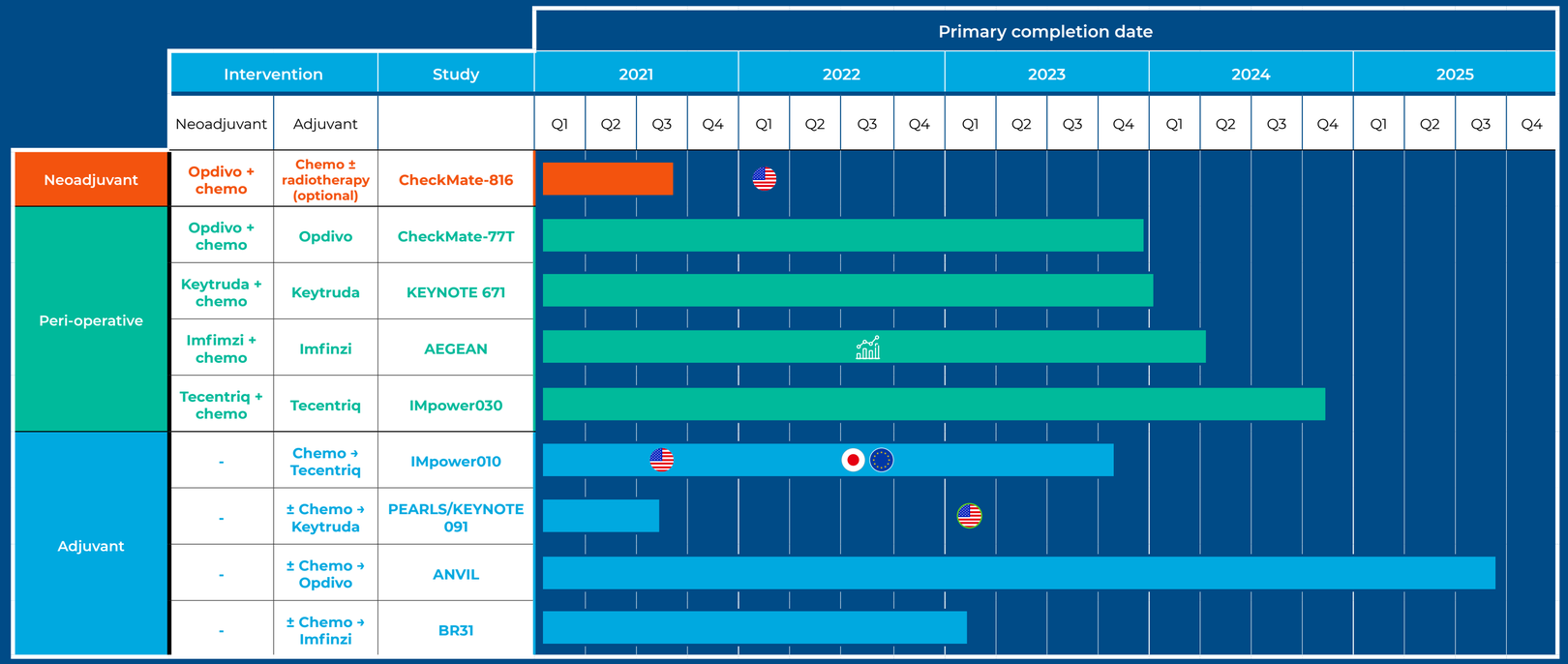
Many studies investigating same-class anti PD-(L)1 drugs are expected to read out within the next three years [2,3]

First global approvals highlight the risk of label restrictions

The risk of label restrictions by PD-L1 expression open the opportunity for differentiation across products and settings

Pivotal trial landscape in resectable NSCLC (driver mutation negative) [2,3]

CPI seeking new horizons in resectable disease



Regional differences in label restrictions for anti-PD-(L)1 in NSCLC [2,3]

Stage IV metastatic	Stage III unresectable	Adjuvant	Neoadjuvant
Keytruda (1L)	Imfinzi (consolidation)	Tecentriq	Opdivo + chemo
≥ 1%	All comers	≥ 1%	All comers
≥ 1%	All comers	≥ 1%	*To be determined*
≥ 50%	≥ 1%	≥ 50%	*To be determined*

Market size

Data derived from CancerMPact® modules:

[2] Treatment Architecture (2022)

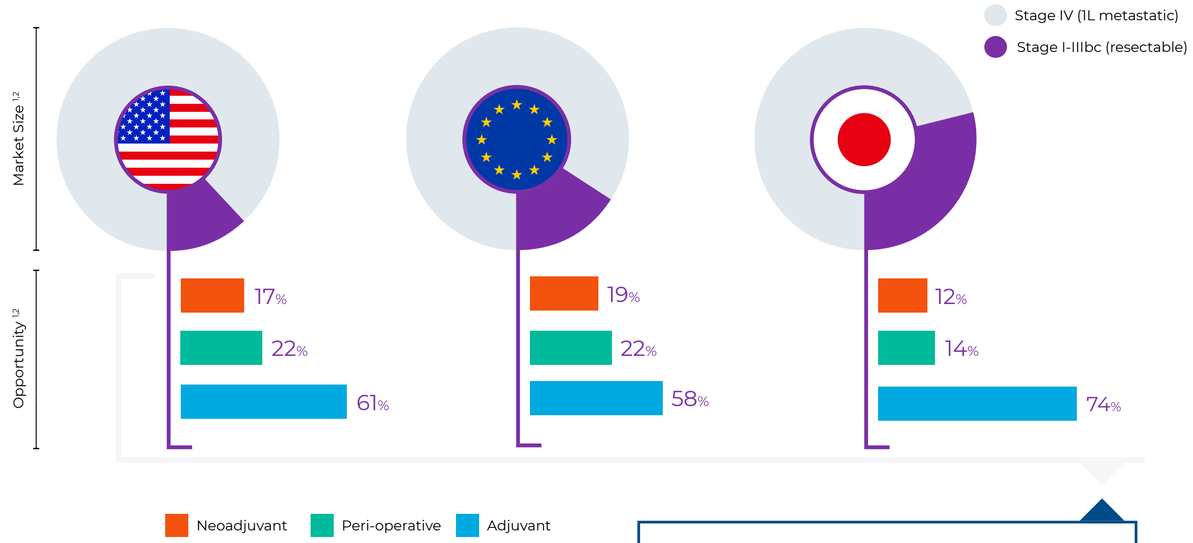
[3] Future Trends and Insights (2022)

All analysis are current as of October 25, 2022

The key to winning resectable NSCLC

Understanding the global challenges and opportunities with a smaller market size than metastatic disease

The market size (treated patients) for resectable disease is significantly smaller than for metastatic disease



Data derived from CancerMPact® modules:

[1] Patient Metrics (2022)

[2] Treatment Architecture (2022)

Success factors

Global differences in management of resectable disease

In clinical practice, the standard of care management of resectable disease may vary across regions and pose different opportunities for each particular approach

Clinical and commercial profile of interventions in resectable disease

The differentiated clinical and commercial profile of each approach has strategic implications that may be leveraged in each market

Positive differentiator (driver)

Neutral differentiator

Negative differentiator (barrier)

	Neoadjuvant	Peri-operative	Adjuvant	
Tumor immunological priming	●	●	●	Presence of original tumor biomass may allow a more efficient priming of immune cells and treat micrometastasis earlier
Tumor downstaging and downsizing	●	●	●	Potential increase of resectability and achievability of negative margins
Biological assessment	●	●	●	Pathological surrogates (e.g., pathologic complete response (pCR), major pathological response (MPR)) of survival may enable innovative pay-per-performance
Risk of surgery delay	●	●	●	Risk of disease progression or developing adverse events after neoadjuvant therapy that can delay/prevent subsequent surgery
Cost to payers	●	●	●	Cost of therapeutic intervention, including drugs and disease management, to payers
Ease of implementation	●	●	●	Ability to incorporate in clinical practice based on current disease management frameworks

All analysis are current as of October 25, 2022

Critical factors of commercial success

Key for winning in resectable NSCLC

Regulatory restrictions, timing of market entry, brand identity, and product differentiation will determine uptake

Critical factor Insight

TIMING OF MARKET ENTRY

With limited product differentiation, first approvals may gain strategic advantage in a historically "first-come first-serve" market

BRAND IDENTITY

Leveraging halo-effect of IO leaders in unresectable or metastatic NSCLC

REGULATORY RESTRICTIONS

Understanding impact of and seizing opportunities created by regulatory label restrictions

SECURING REIMBURSEMENT

Leveraging surrogate survival endpoints (e.g., pathological complete response (pCR), major pathological response (MPR)) may enable pay-per-performance models

STRENGTH OF CLINICAL DATA

Generating evidence in clinical studies and subgroup analyses will be key to position products and approaches in resectable disease

PRODUCT DIFFERENTIATORS

Leveraging product differentiation (e.g., favorable dosing schedules) and innovation (e.g., subcutaneous/ oral formulation) may foster stakeholder preference and drive uptake

IDENTIFYING AT-RISK POPULATION

Exploring biomarker approaches (e,g., minimal residual disease (MRD), circulating tumor DNA (ctDNA)) that may guide treatment decisions post-surgery, hence enabling ways to justify reimbursement

UNDERSTANDING MARKET & PRACTICE DYNAMICS

Analyzing drivers and barriers that can influence uptake of each product and approach in each region

Adapting to an evolving clinical landscape

Fostered by the introduction of IO in resectable disease, understanding how IO naïve and IO progressors fit within a new treatment paradigm that enables exposure to IO agents in resectable disease will be key to seizing opportunities in an evolving clinical landscape

Pipeline products for IO naïve resectable NSCLC

Exploring next-generation IO products that synergize with anti-PD-(L)1 agents in resectable disease in IO naïve patients

New studies in 1L metastatic NSCLC

Including a representative sample of IO-exposed patients in new studies for 1L, as IO may become standard of care in resectable disease

Pipeline products for IO progressors

Understanding how approaches currently investigated only in refractory metastatic NSCLC in IO progressors may have an opportunity in earlier lines of therapy (e.g., 1L)

Marketed products

Adapting to shifts in SOC that occur earlier in the treatment paradigm by generating RWE in IO progressors across different lines of therapy

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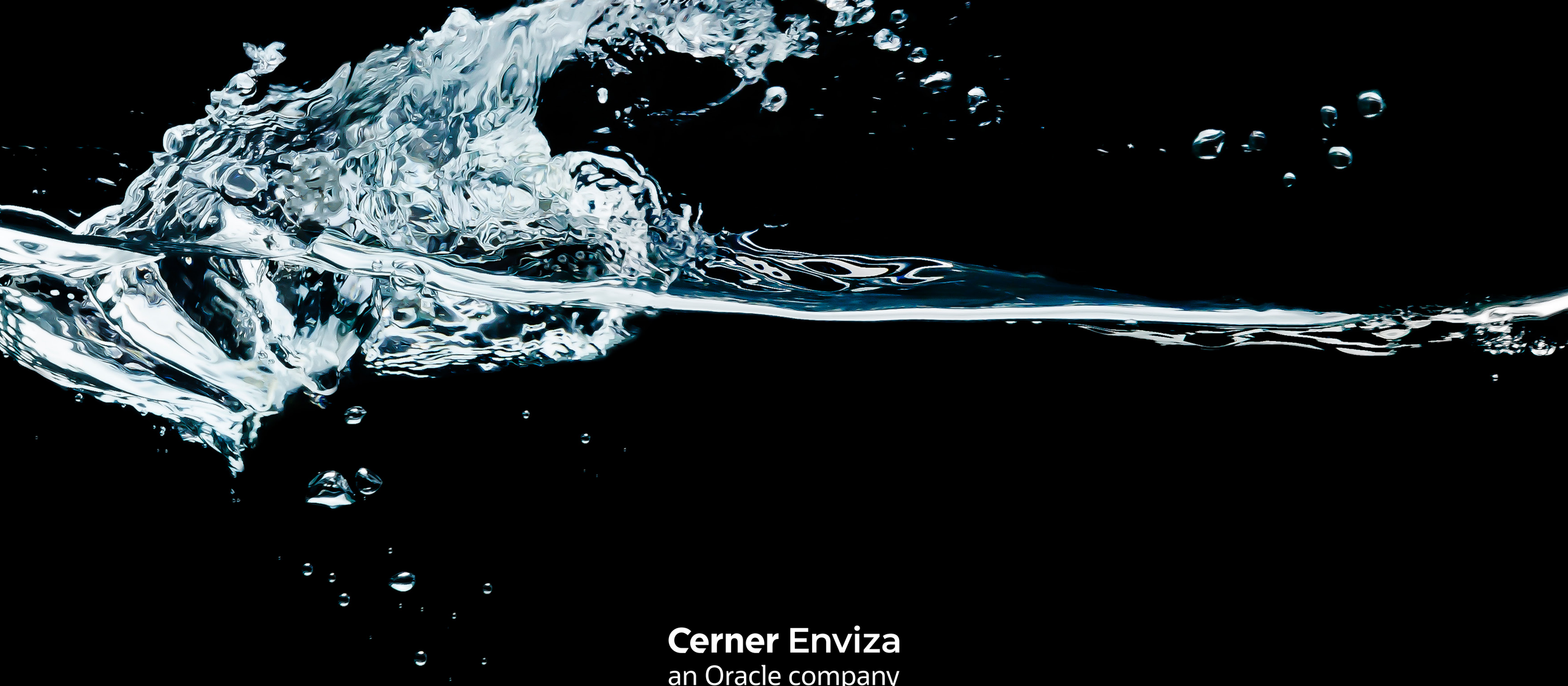

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For more information on Cerner Enviza, visit www.cernerenviza.com. For more information, please contact info@cernerenviza.com.

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