4th edition

Unmet challenges in high risk hematological malignancies: from benchside to clinical practice

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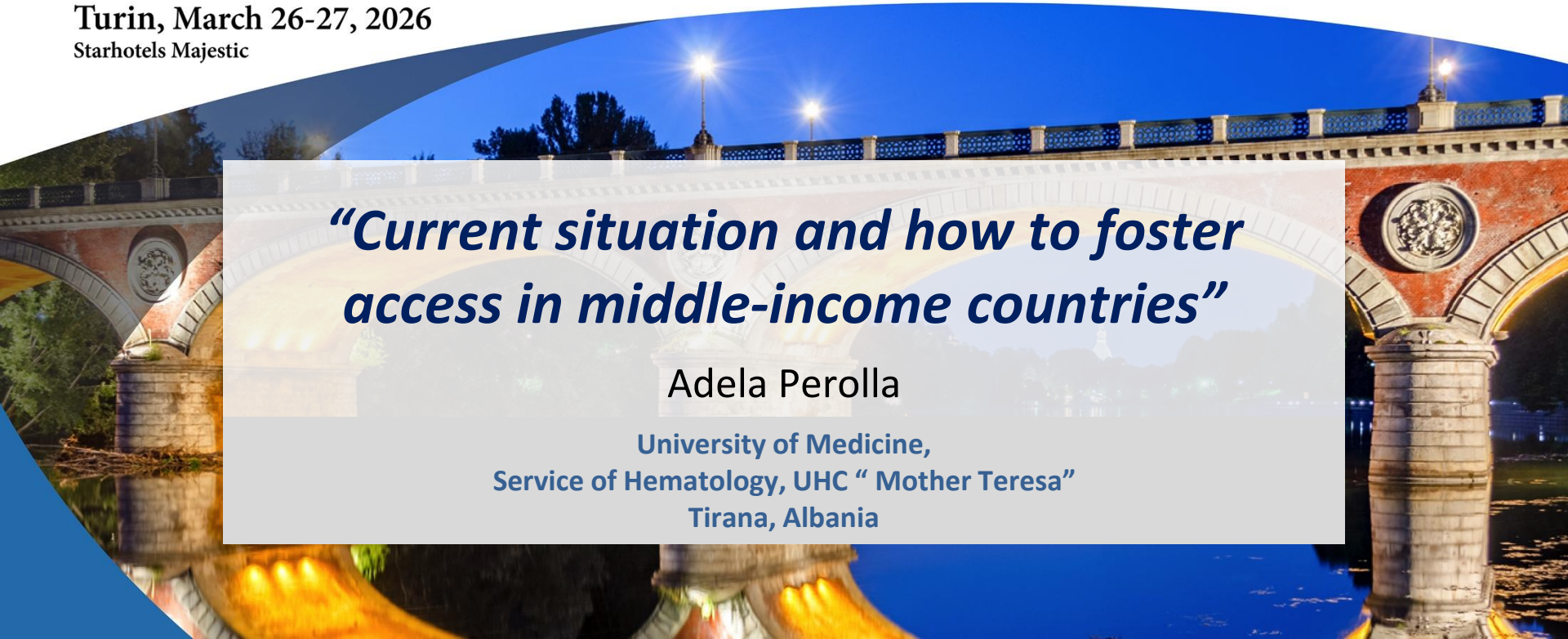

"Current situation and how to foster access in middle-income countries"

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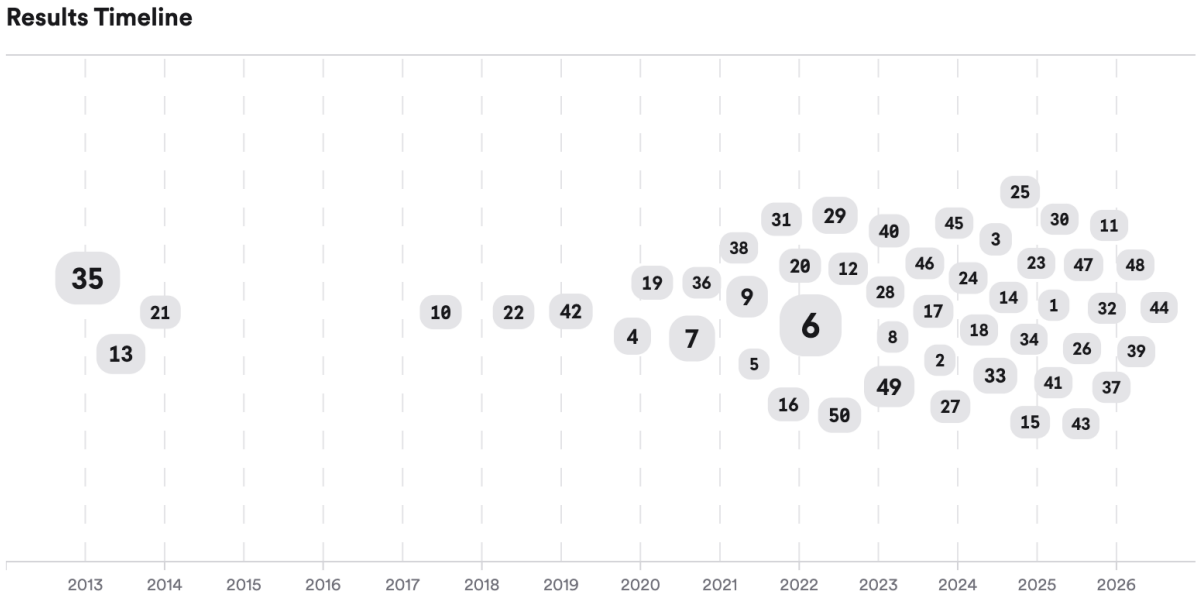
Disclosures of Adela Perolla

Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other
No disclosures							

Objectives

1. Defining the “middle-income” in haematology context
2. Access disparity for High Risk patients
3. Current situation and access to novel therapies
4. Access disparity as High-Risk
5. Strategies to foster access

Timeline - evolution of research on access disparities and solutions for HRHMs in MICs.



High-risk hematological malignancies (HRHMs)
Larger markers indicate more citations.

Consensus. Accessed March 15, 2026.
Scite.ai . Accessed March 15. 2026

MIDDLE – INCOME

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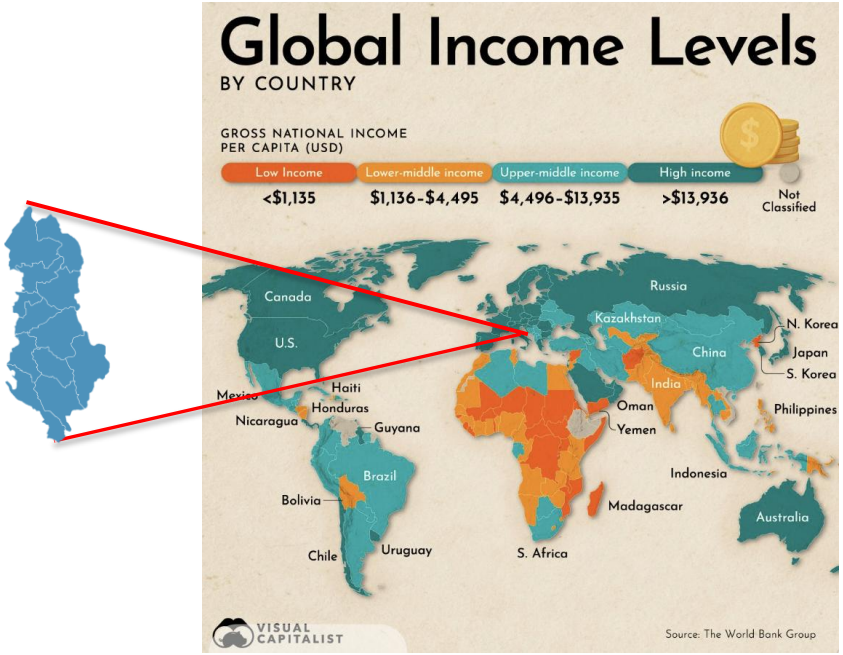

https://www.worldbank.org/

Access disparity for High Risk patients

Disease	Age Group	Survival in HICs	Survival in MICs / LMICs	Estimated Survival Gap	Key References
Acute Lymphoblastic Leukemia (ALL)	Pediatric (0–14 yrs)	**80–90% 5-year survival**	**39–63%** in several LMIC cohorts; some UMIC centers **~60–75%**	~20–40 percentage points lower	Ariello et al. 2025 ; Gupta et al. 2014 ; Hessissen et al. 2013 Farrag et al. 2023 Bekhit et al. 2025 Negash et al. 2025
	Adolescent / Young Adult (15–39 yrs)	**70–85% 5-year OS**	**40–60%** in LMIC/UMIC cohorts	~20–30 points lower	Ariello et al. 2025; Gupta et al. 2014
Acute Myeloid Leukemia (AML)	Pediatric (0–14 yrs)	**60–75% 5-year survival** in cooperative group protocols	Heterogeneous estimates; generally **substantially lower survival**	Likely >20–30 points lower	Ariello et al. 2025 Farrag et al. 2023
	AYA / Adult (15–39 yrs+)	**45–60% survival** depending on cytogenetic risk	Reliable MIC estimates not consistently reported	Cannot quantify precisely	Ariello et al. 2025 Farrag et al. 2023

Access disparity for High Risk patients

Disease	Age Group	Survival in HICs	Survival in MICs / LMICs	Estimated Survival Gap	Key References
Hodgkin Lymphoma (HL)	Pediatric (0–14 yrs)	**90–98% OS**	**63–88% OS/EFS** depending on stage and treatment access	~20–35 percentage points lower	DeBoer et al. 2020 ; Sullivan et al. 2020; Howard et al. 2007 ; Habashy et al. 2023; Kabahweza & Spencer 2024; Adam et al. 2021
	Adolescent / Young Adult (15–39 yrs)	**>90–95% OS**	**60–90% OS** depending on treatment completion	~10–30 points lower	DeBoer et al. 2020 ; Sullivan et al. 2020 ; Bechara et al. 2025 ; Kabahweza & Spencer 2024
Non-Hodgkin Lymphoma (NHL)	Pediatric (0–14 yrs)	**80–90% survival** with modern therapy	Lower survival and higher mortality in LMICs; wide variation	~20–40 point gap	Costa et al. 2022 ; Ali et al. 2023 ;Hessissen et al. 2013 ; Farrag et al. 2023
	AYA / Adult (15–39 yrs+)	Subtype-dependent: **~60–90% survival** in HICs	Reliable MIC population estimates limited	Cannot quantify precisely	Costa et al. 2022 ; Ali et al. 2023 ; Slone et al. 2018 ; Petro et al. 2025 ; Gorostegui-Obanos et al. 2024

Unaffordable to lose life…

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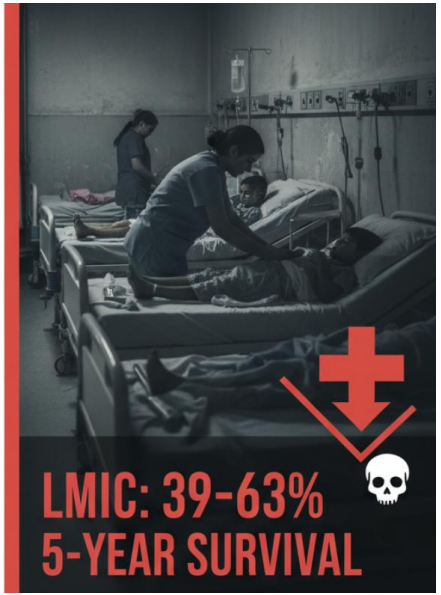
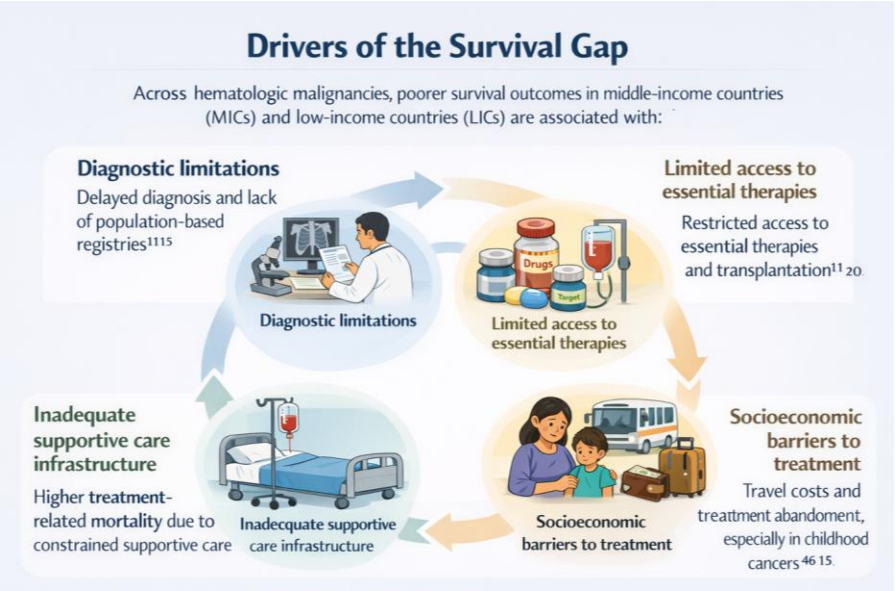
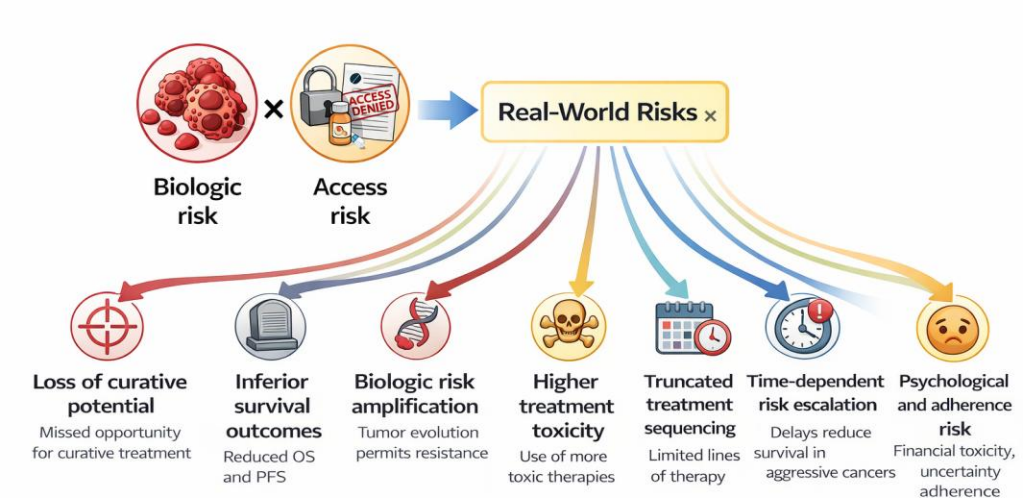




Novel Therapies: The New Standard—But Not for All
The *real – world risk* for haematologic neoplasms [1-9]

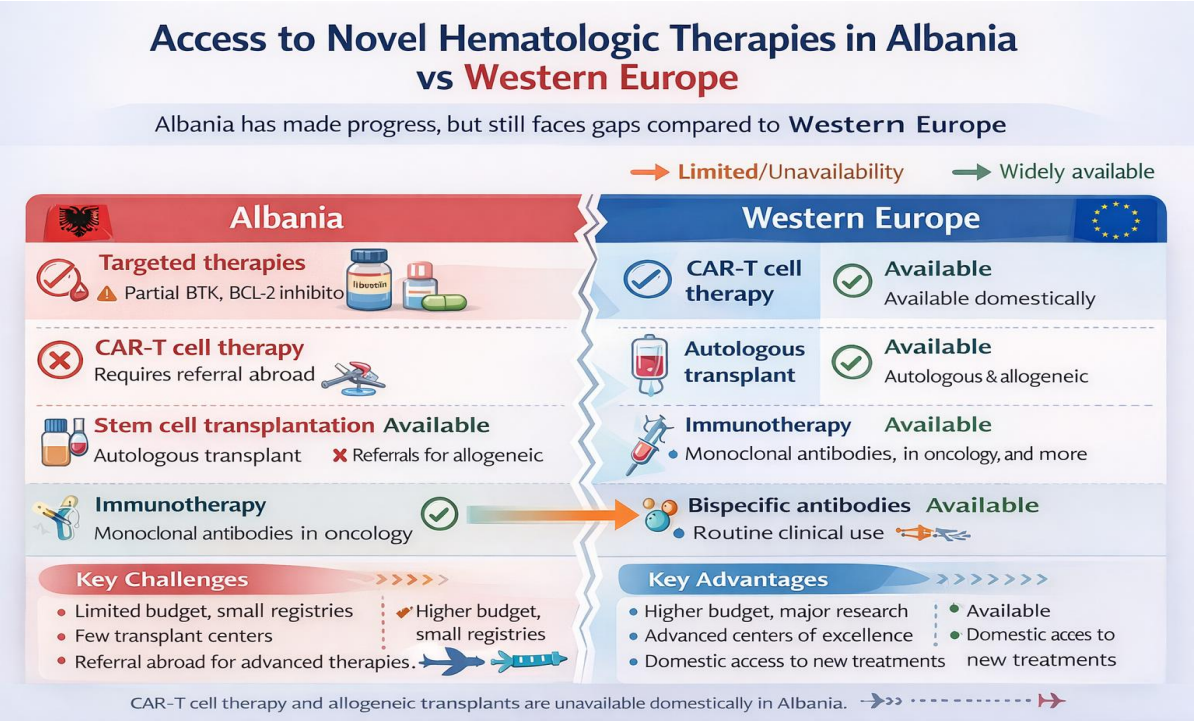
In Albania and other MIC manifests as:

“ a system-level inability to consistently translate diagnostic modernization into therapeutic modernization”.



Meanwhile in Albania …

Only one patient



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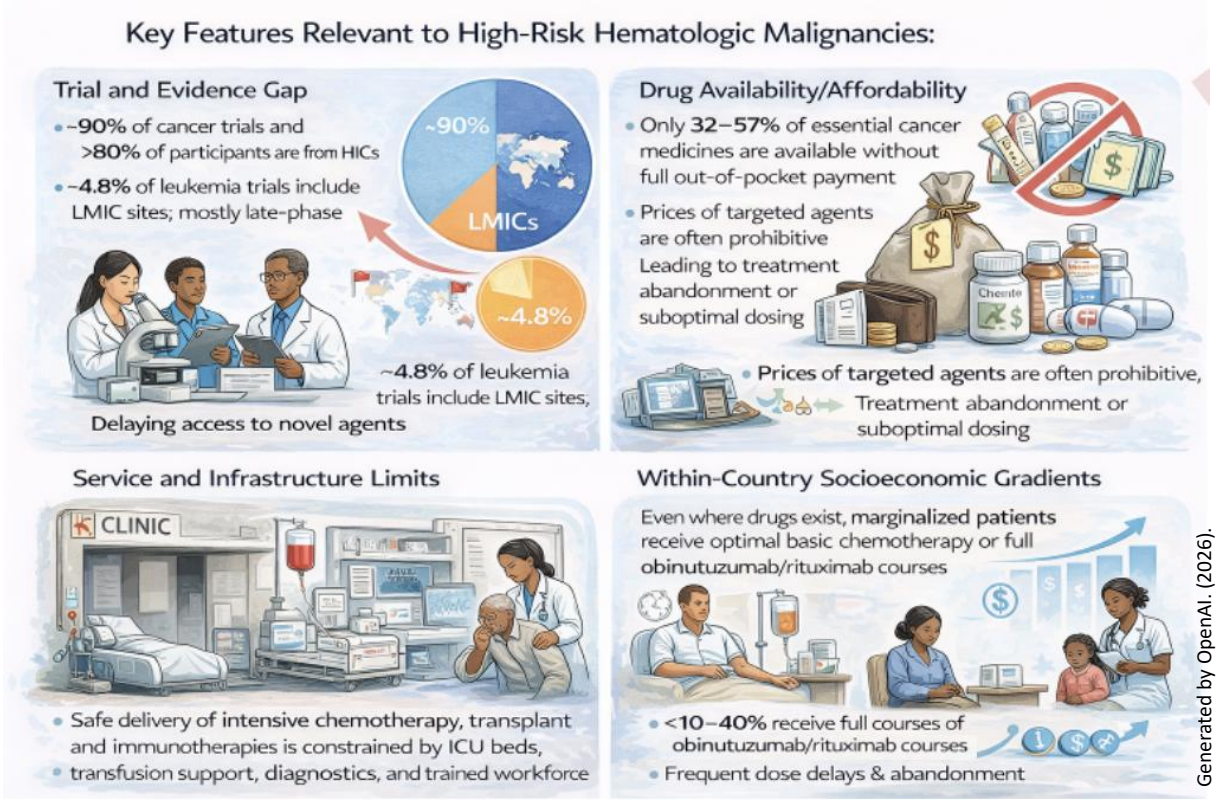
Current Situation of Access Disparity [10-17]



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Access is "high risk" in itself

Examples of adaptive but unequal care in hematology

Domain	What happens now in many MICs	
Chemo / protocols	"De-escalated" or locally adapted regimens, often generic-based, can achieve 40–70% survival in aggressive lymphomas/HL when well organized	Gopal, S. (2023). *Seminars in Hematology*. Singh, S. (2021). *International Journal of Scientific Reports*, 7, 325.
TKIs in CML	Generic imatinib improves survival, but lack of 2nd/3rd gen TKIs, diagnostics, and monitoring limits outcomes vs HICs	Malhotra, H.et al. (2019). *ASH Education Program*, 2019
AML & transplant	IC often unsafe due to weak supportive care; transplant capacity and donor registries limited	Morcos-Sandino, M.,et al. (2025). *Biomedicines*, 13.

Personal opinion….

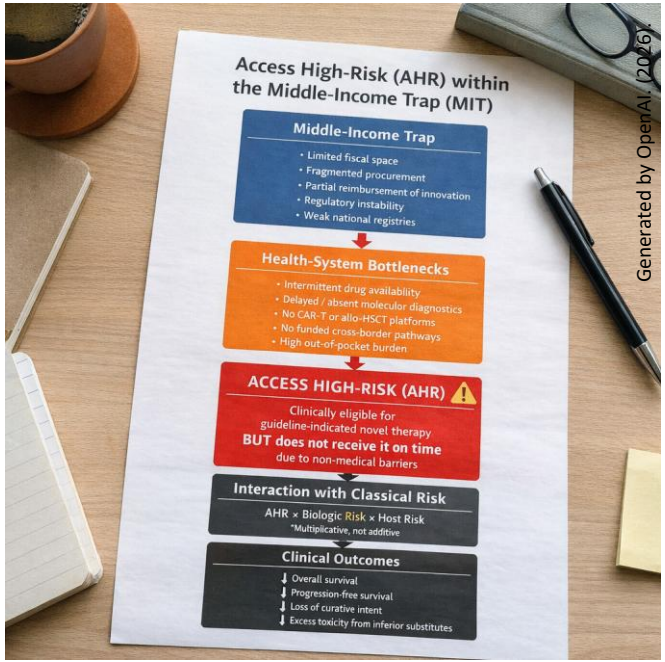
Access High-Risk (AHR) = predictable failure to deliver guideline-indicated innovation.

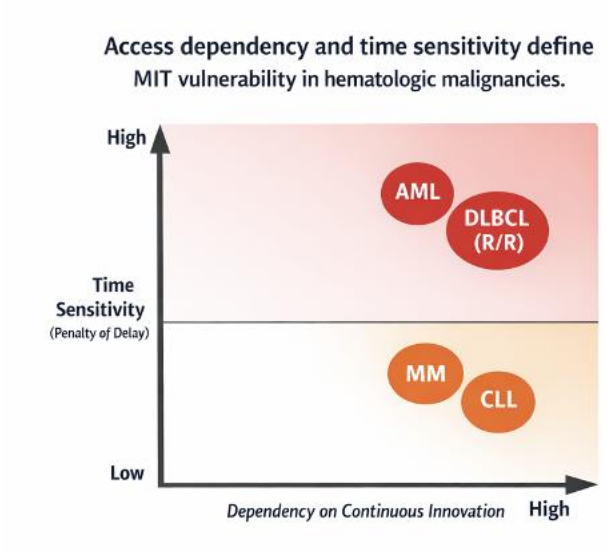
This is **not social commentary**.

It is a **measurable prognostic modifier**.

"Access disparity is not merely inequity —
it is a **system-induced high-risk state**."

Access barriers in high –risk malignancies [18-20]



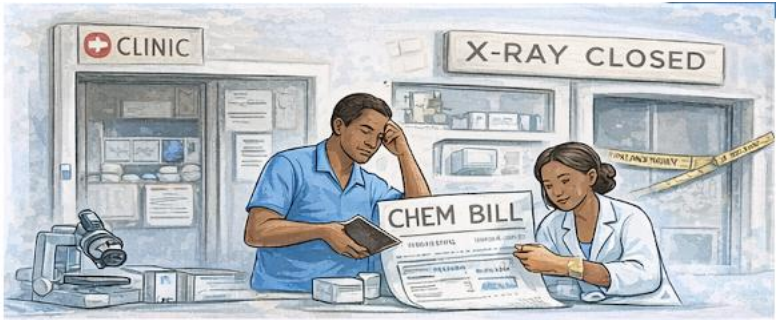


Access dependency and **time sensitivity** define MIT vulnerability in hematologic malignancies.

Barriers: Economic & Systemic

- **High cost of new drugs** relative to national health budgets.

- **Regulatory delays:** slow approval processes for new drugs in many MICs.



- **High cost of new drugs** relative to national health budgets.
- **Limited insurance coverage;** most patients pay out-of-pocket.
- **Weak infrastructure:** insufficient diagnostic labs/pathology services; shortage of trained specialists; inadequate transplant/ radiotherapy facilities

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María Félix Torres Nolasco et al. *Journal of Clinical Oncology* (2025).
J. D. de Souza et al. Countries.." *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*, 34 1 (2016): 6-13
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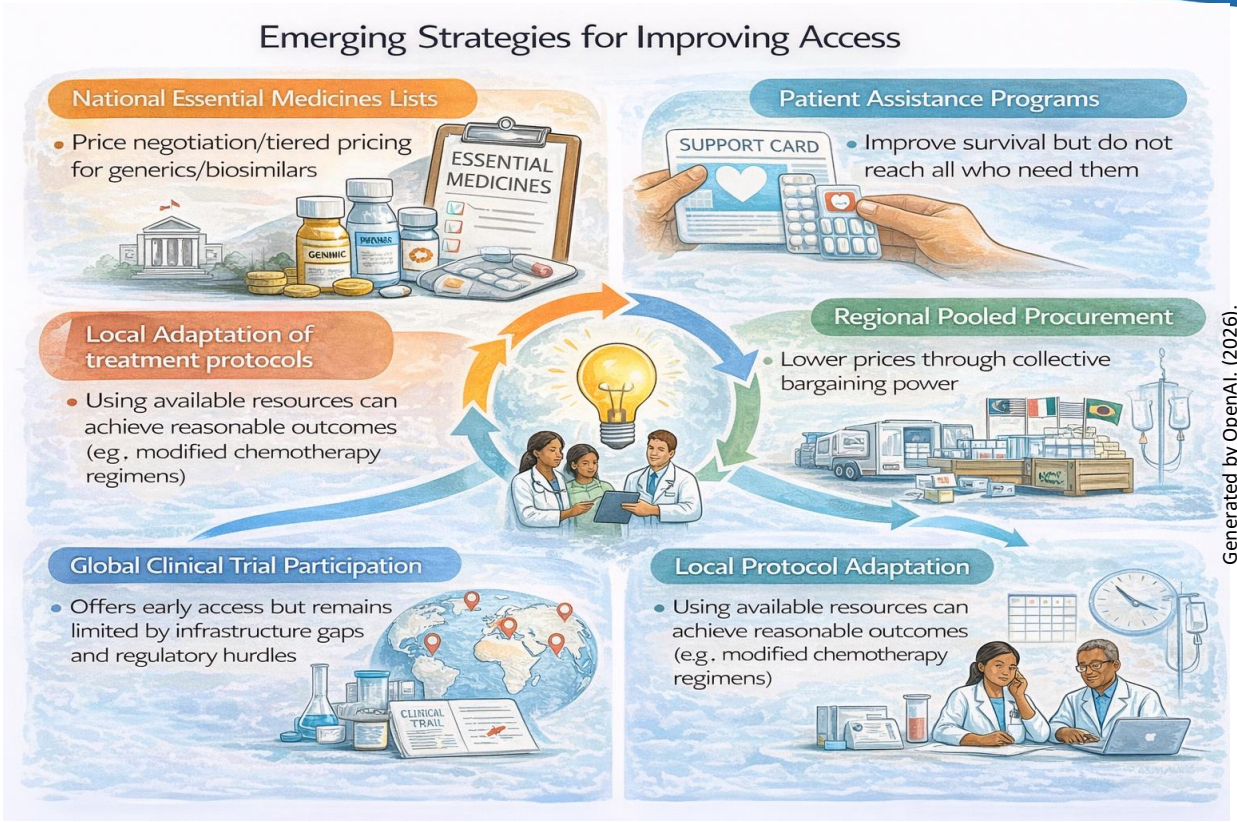
How to Foster Access in MIC

Strategic Pillar	What to Do	Why It Matters
Redefine High Risk	• Recognize *access-constrained* patients in guidelines • Prioritize for funding, registries, trials	Aligns risk stratification with real-world constraints
Build Fit-for-Context Services	• Prioritize malignant hematology in cancer plans • Invest in diagnostics, transfusion, infection support • Develop cost-efficient transplant models	Maximizes cure rates with sustainable infrastructure
Expand Access to Novel Agents	• Essential medicines lists, tiered pricing • Patient assistance, managed entry agreements • Regional procurement, biosimilars	Reduces out-of-pocket costs and treatment interruptions
Use Research as Access	• Include MIC centers in early & pragmatic trials • Global trials with MIC–HIC comparisons • Test adapted regimens and dosing	Converts research into early, equitable access
Protect the Poor	• Means-tested coverage, travel/housing support • Patient navigation, task-shifting	Prevents abandonment despite nominal availability

Solutions & Innovations [18-28]



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Conclusions

- Access disparity is itself a critical “high risk” factor for patients with HRHMs in MICs—often outweighing biological risk stratification alone.
- Absence or unaffordability of newer agents in MIC leads directly to inferior survival rates compared to HIC benchmarks.
- Financial toxicity remains a major cause of treatment abandonment or non-adherence even when drugs are technically available.
- Closing this gap demands integrated action across policy reform, financing innovation, service delivery strengthening, social protection measures, and inclusive research strategies.

HRHMs – high risk hematologic malignancies
MICs - middle income countries

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"Not all of us can do great things, but we can do small things with great love."
— Mother Teresa

Thank you!

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