Financing Models for CAR-T Cell Therapies in Healthcare Systems: A Scoping Review

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contato@inovamedical.com.br

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Cíntia Araújo[1,2]; Gilson Dorneles[1,2]; Nayê Balzan Schneider[1]; Maicon Falavigna[1]

1- HTA Unit, Inova Medical, Porto Alegre, Brazil.

2- Hospital Moinhos de Vento, Porto Alegre, Brazil.

Background

- ➢ Chimeric Antigen Receptor T-cell (CAR-T) is a promising immunotherapy in oncological diseases, particularly in hematological diseases like leukemias and lymphomas.
- ➢ Its personalized manufacturing process, though innovative, incurs significant costs, posing a challenge, especially for public health systems.
- ➢ To ensure broader access to these groundbreaking treatments, there is a pressing need to develop optimized policies and financing models.

Objectives

To review financing models for CAR-T therapy in healthcare systems globally.

Methods

- ➢ Scoping review was conducted following the JBI methodology.
- ➢ Databases: MEDLINE (via PubMed) and LILACS (search date: March 6, 2023), plus manual search which included references from the selected studies and grey literature.
- ➢ The protocol is registered and accessible at doi: 10.17605/OSF.IO/95ACK.

Results

- ➢ From 615 references, 29 publications were included in the review.
- ➢ The analysis identified 15 countries that currently finance CAR-T cell therapies, encompassing both public and private sectors.
- ➢ The most frequently implemented financing models were *outcome-based payment* (OBP) schemes (n=8 countries), sometimes combined with coverage with *evidence development* (CED) (n=8). This was followed by the *diagnosis-related group* (DRG) model, occasionally supplemented with *additional payments* (add-on payments) (n=3). Other forms of financing were suggested, such as activity-based costing (Figure 1).

Figure 1. Financing models for CAR-T Cell Therapies identified in the scoping review.

	With risk sharing	No risk sharing
Implemented	• Coverage with evidence development; • Performance-based agreements: Outcome-based payment Milestone-based contracts Managed entry agreements • Single-case agreements.	• One-time payment: Diagnosis-related group Add-on payment
Suggested	• Subscription-based; • Value-based payments.	• Centers of Excellence model; • Global episode of care; • Health funds; • Unbundling payment; • One-time payment: Bundled payments Capitated providers payments • Insurance; • Indication-specific pricing.

Conclusion

- ➢ Risk-sharing agreements are an alternative to mitigate the impact of uncertainties in the effectiveness of CART-T, but they are not the only existing strategy
- ➢ OBPs associated with CED seem a promising way to increase access while fostering evidence development.
- ➢ Managers shoud anticipate by seeking alternative financing for these therapies.

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