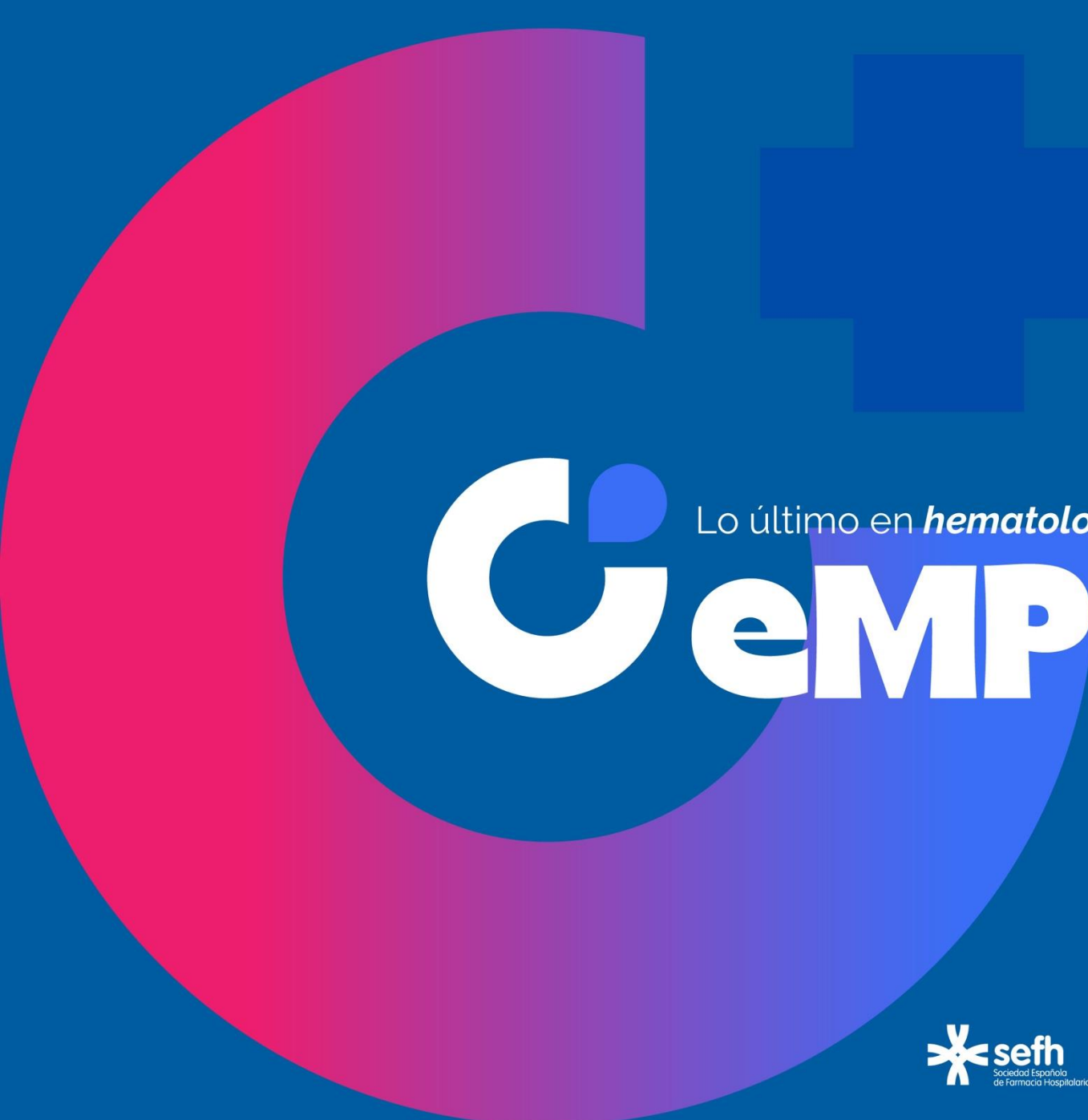




Lo último en *hematología* para *farmacia hospitalaria*

GemPhasis



Con el patrocinio de:
REGENERON*

Lo último en *hematología* para *farmacia hospitalaria* **eMPhasIS**

Profilaxis y LLA

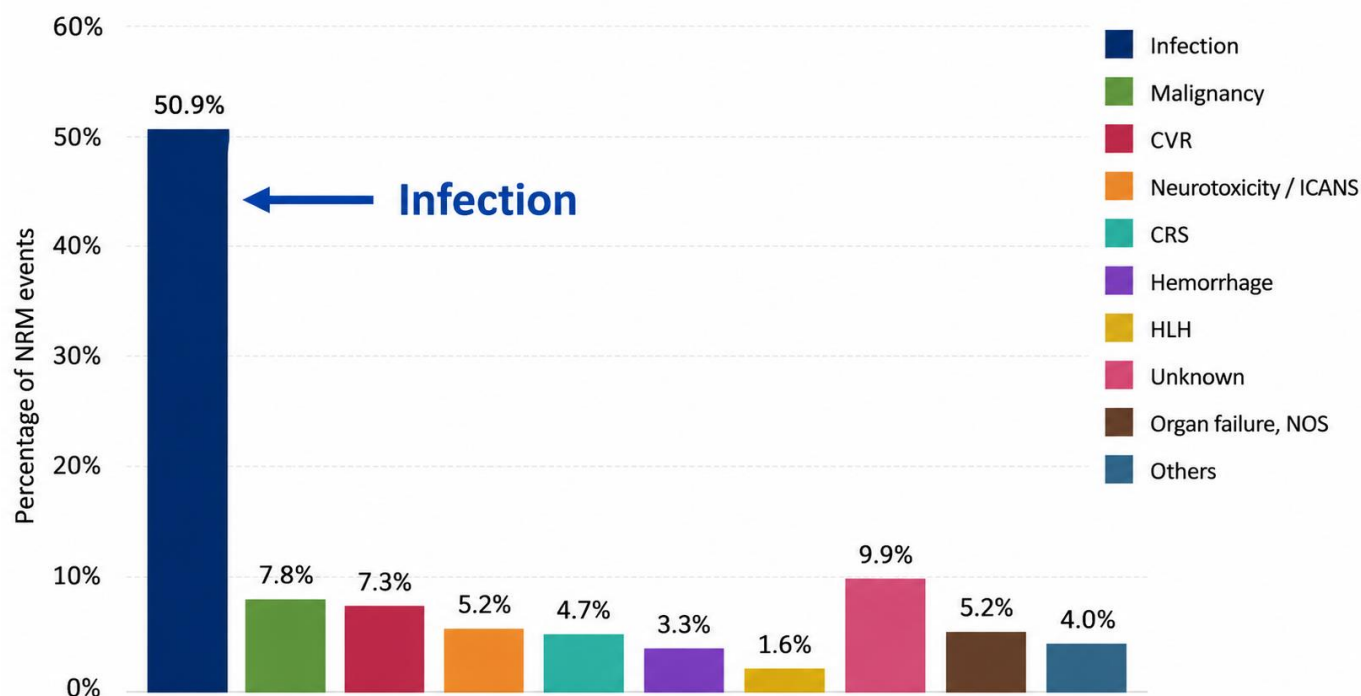
Rising tide, rising threat: Act now to prevent infections in hematological malignancies

- **MORTALIDAD EN PACIENTES HIPOGAMMAGLOBULINÉMICOS**

- Los pacientes con neoplasias hematológicas presentan un riesgo de mortalidad por infecciones significativamente elevado incluso antes de iniciar terapias intensivas. Terapias como CAR-T y BiEsp profundizan en esta hipogammaglobulinemia → 1era causa muerte no relacionada con la recaída.

574 NRM events (total N=7604 patients)

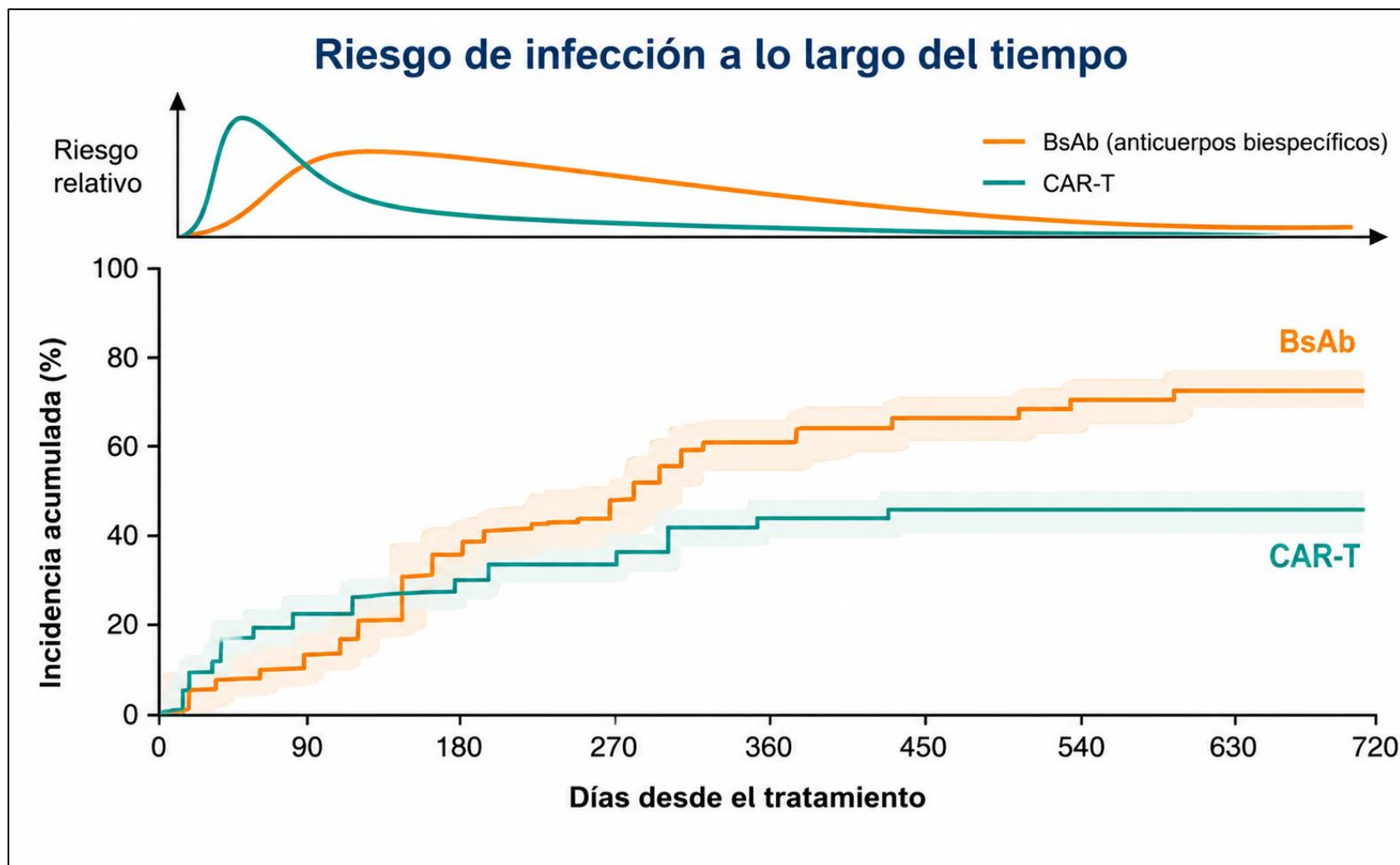
- ¿Suplementación profiláctica?



Rising tide, rising threat: Act now to prevent infections in hematological malignancies

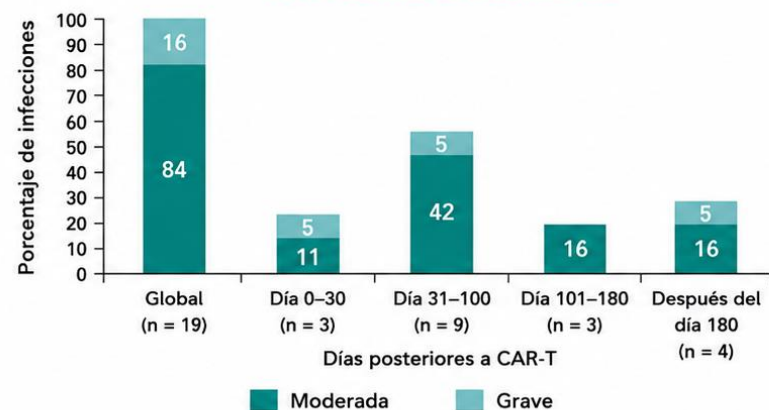
 Strategy	 Initiate	 Patient population	 Trigger	 Rationale
Prophylactic IgRT <i>A preventative, upfront strategy</i>	IgRT is started before infections occur	- History of infections - Multiple myeloma > NHL - Severely low IgG <200 mg/dL - Immunocompromised state (B-cell aplasia)	Initiation of therapy (or early in the course), regardless of IgG level of infection history	Help prevent immune deficiency, which may reduce early infectious complications
Pre-emptive IgRT <i>A risk-adapted strategy</i>	IgRT is started after early signals of immune compromise, but before recurrent infections	- No infection history - Expected IgG <400 mg/dL - High inflammatory and tumor burden markers	Declining IgG below a predefined threshold (e.g. <4 mg/dL) or early isolated or mild harbinger infections	Intervene early to help reduce or potentially avoid serious clinical sequelae
Rescue IgRT <i>A treat-on-demand strategy</i>	IgRT is started only after infections occur	- Young, no comorbidities - Intact hematopoiesis - Low inflammatory and tumor burden markers - IgG >600 mg/dL	Hospitalization for infection, recurrent infection (≥2 bacterial infections), or proven serious infection	Reserve IgRT for patients with demonstrated benefit

Diferencias CAR-T vs BiEsp

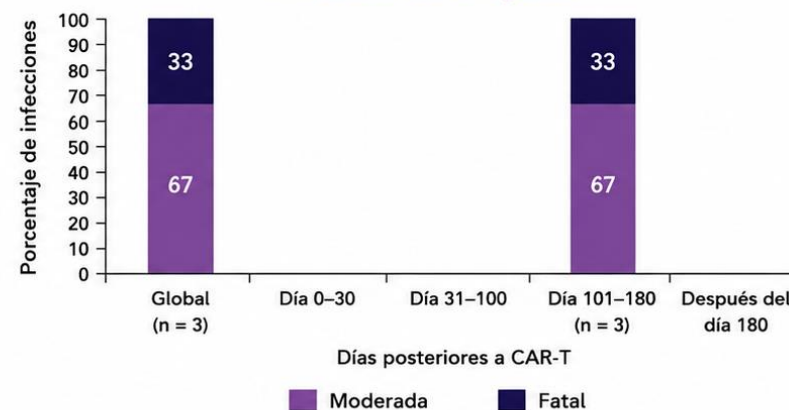


Características BiEsp

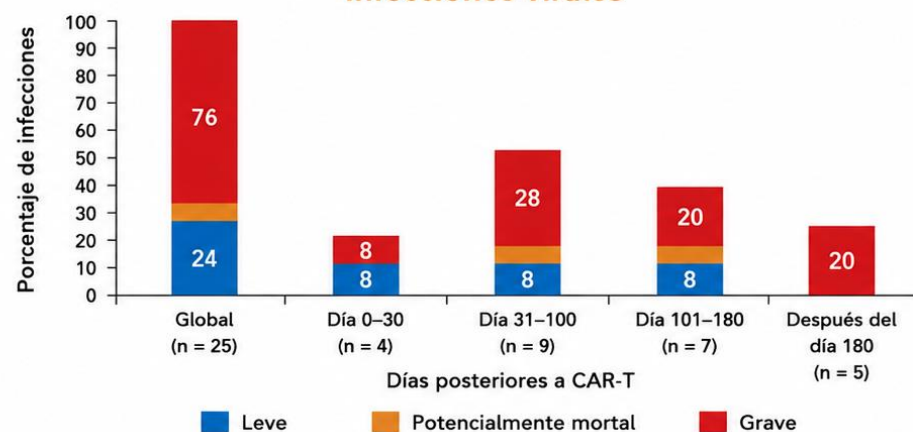
Infecciones bacterianas



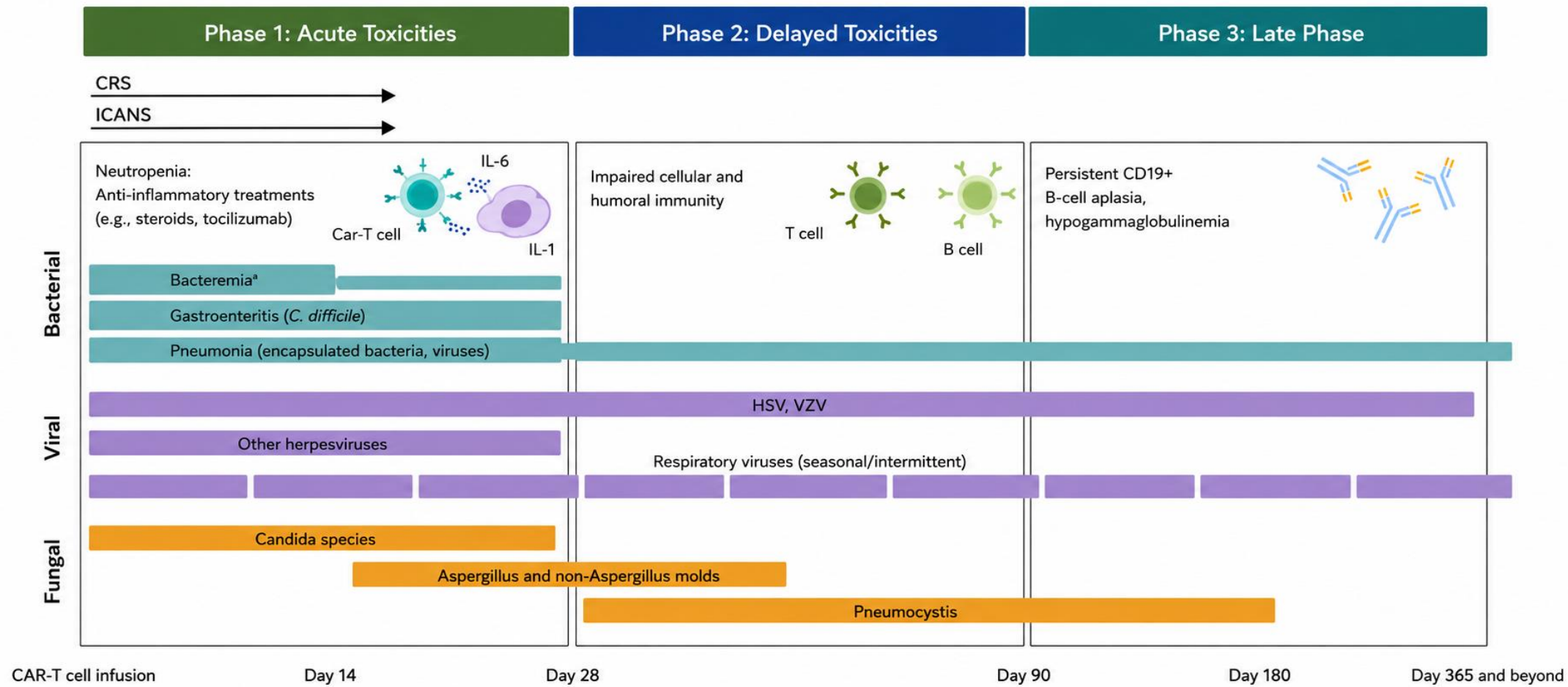
Infecciones fúngicas



Infecciones virales

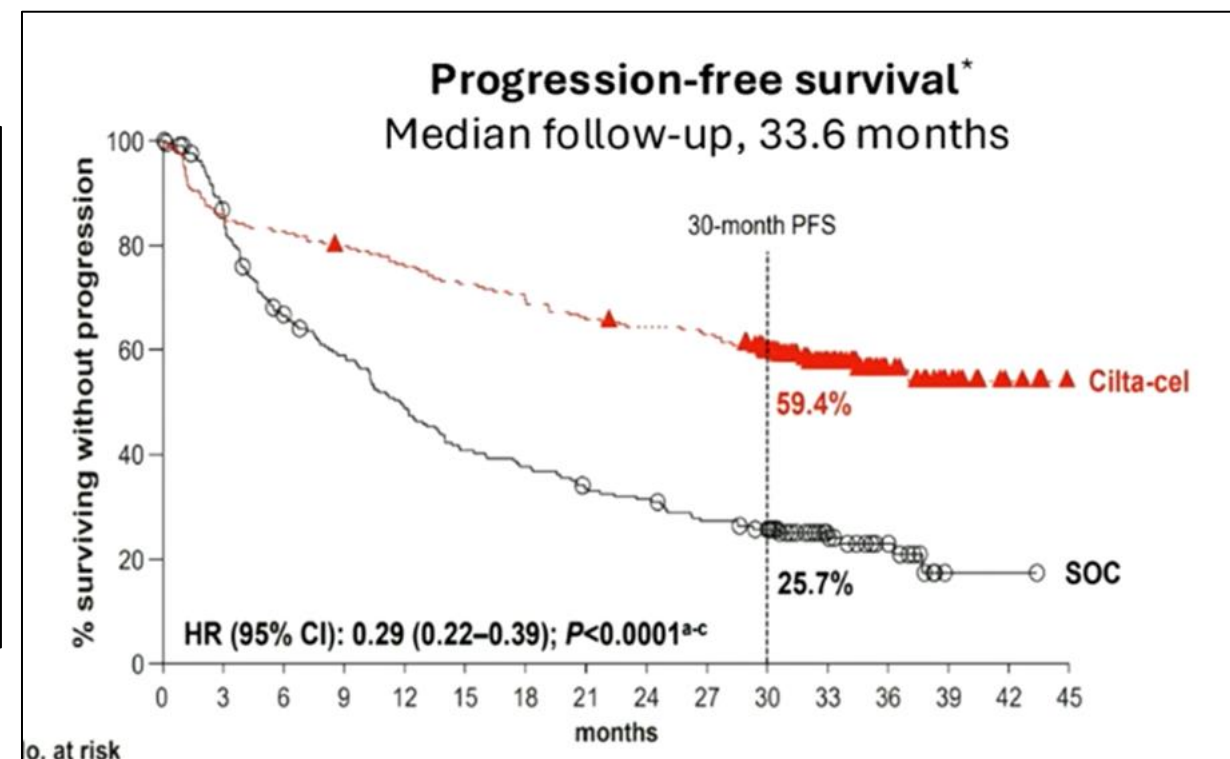
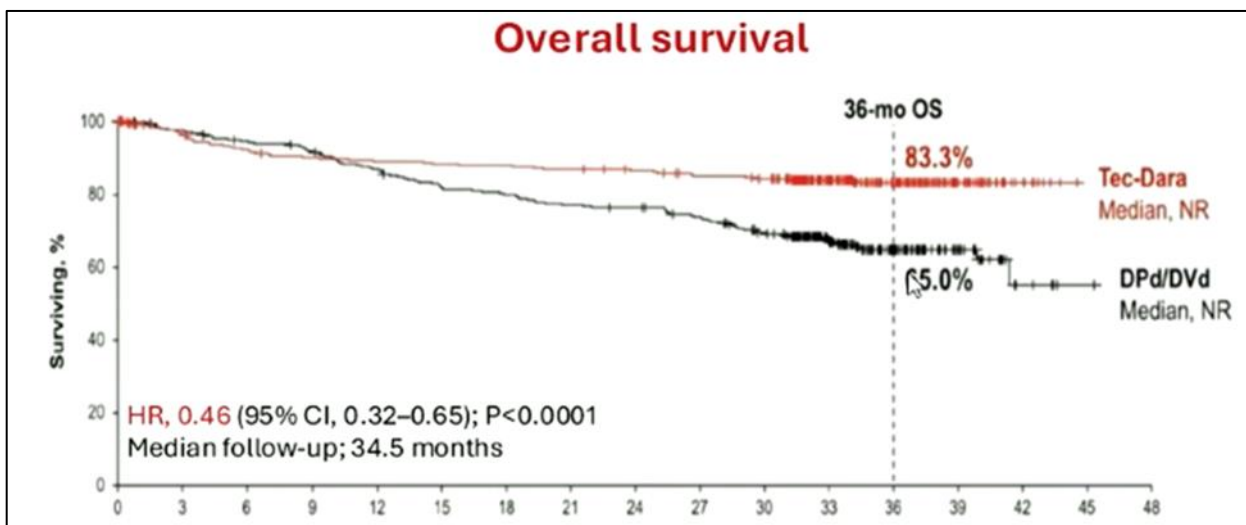


Características CAR-T



Rising tide, rising threat: Act now to prevent infections in hematological malignancies

- CRUCE DE CURVAS DE SUPERVIVENCIA



Infections in Hematological Malignancies: Putting Prevention into Practice

ESTRATEGIAS

Vaccination

**Antimicrobial
Prophylaxis**

**Immunoglobulin
Replacement Therapy**

Infections in Hematological Malignancies: Putting Prevention into Practice

Vaccination- when and which?

At diagnosis¹ – the earlier the better and before treatment²

Conjugated pneumococcal vaccine¹, *

- PCV20, 2 doses 4 weeks apart²
- If not available, PCV13 and ≥2 months later give polysaccharide vaccine too (Pneumovax 23)¹

Recombinant varicella vaccine¹

- Not live so can be given to immunocompromised patients¹
- Shows 87.2% efficacy (95% CI: 44.2%–98.6%) in patients with haematological malignancies[†]
- Give even if prior history of shingles³

Influenza¹ / COVID-19¹ (flu-adjuvated where available)

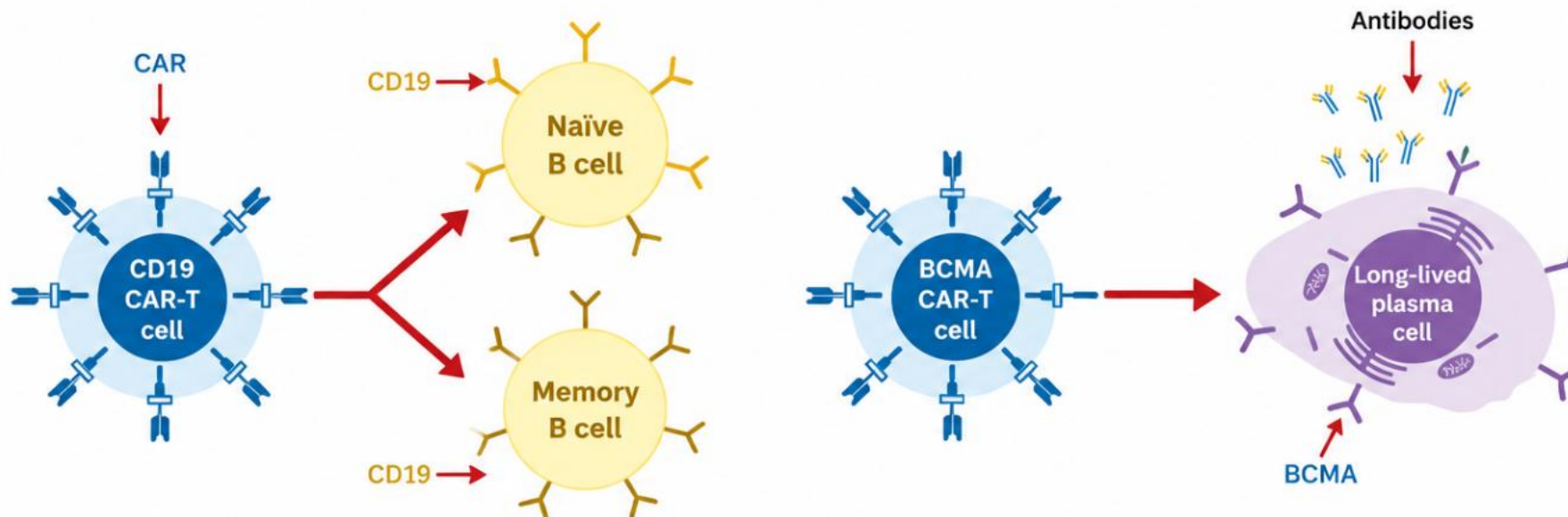
RSV (if eligible and aged 75-79 years)¹

Remember household members for flu¹

CHECK FUNCTIONAL ANTIBODY RESPONSES 6 WEEKS AFTER VACCINATION

Rising tide, rising threat: Act now to prevent infections in hematological malignancies

'On-target' 'off-tumor' effects



Infections in Hematological Malignancies: Putting Prevention into Practice

Antimicrobial prophylaxis

Specific antimicrobial prophylaxis is recommended based on overall infection risk considering the type of malignancy and treatment regimen¹

Antibiotics:

- Consider local resistance patterns and rotating courses when deciding which Abx to go for- broad spectrum needed e.g co-trimoxazole/ azithromycin¹
- Levofloxacin² often recommended in MM following TEAMM trial but caveat of 12 weeks therapy only during induction therapy rather than long term prophylaxis (useful if neutropenia also an issue)

Antiviral:

- Acyclovir for HSV/VZV prophylaxis. Screen and prophylaxis if Hep B³

Antifungal:

- Generally, not recommended unless deemed high risk e.g combined steroid use with B cell depletion³

➤ **Infection diary for 6 months prior and 6 months post**

Infections in Hematological Malignancies: Putting Prevention into Practice

Immunoglobulin replacement therapy – When to initiate?

For those patients at high risk of infection with significant infection history

IgG < 4g/L – repeat testing over disease course is important¹

Recurrent or severe bacterial infection despite continuous oral antibiotic therapy for 6 months¹

Documented failure of serum antibody response to polysaccharide vaccine challenge – although may be of limited value in patients with very low serum IgG (<3 g/L)^{1,*}

Adult Acute Lymphoblastic Leukemia (EWALL): Towards improving the efficacy and safety of CAR T cells in R/R ALL

- Strategies to decrease the main toxicities

Tumor burden

- Low disease burden is associated with lower toxicity and higher efficacy.
- Individualized BT based on disease kinetics, previous therapies and antigen expression

Construct

- Consider construct characteristics when assessing toxicity risks

Dose schedule

- Fractioned administration seems to be associated with lower toxicity

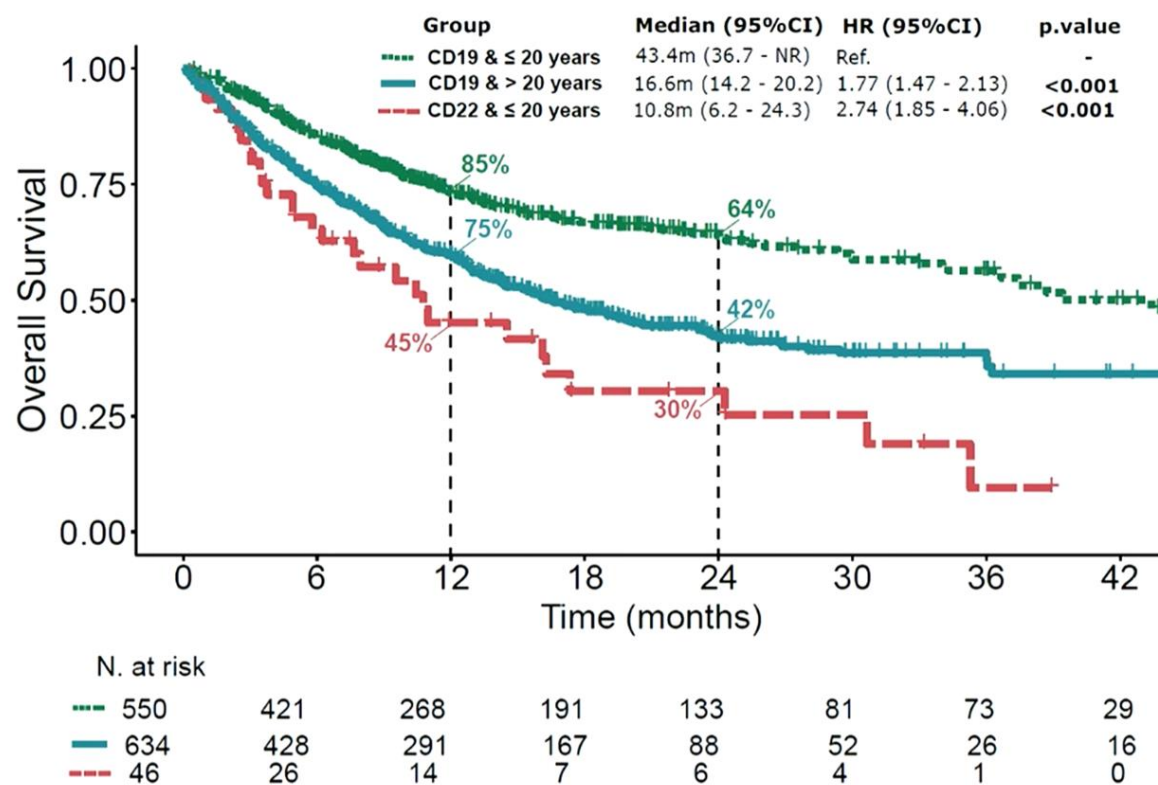
Patient management

- Need for individualized predictive and management tools for B-ALL.
- Better tools (CAR-T kinetics, NGS MRD) to individualize allo-HCT

Adult Acute Lymphoblastic Leukemia (EWALL): Towards improving the efficacy and safety of CAR T cells in R/R ALL

- Constructo

CAR T-cell efficacy Antigen target and age



Adult Acute Lymphoblastic Leukemia (EWALL): Towards improving the efficacy and safety of CAR T cells in R/R ALL

- Administración

Fractionated administration

