

Indicaciones del uso de los anticuerpos biespecíficos en los linfomas difusos de células grande

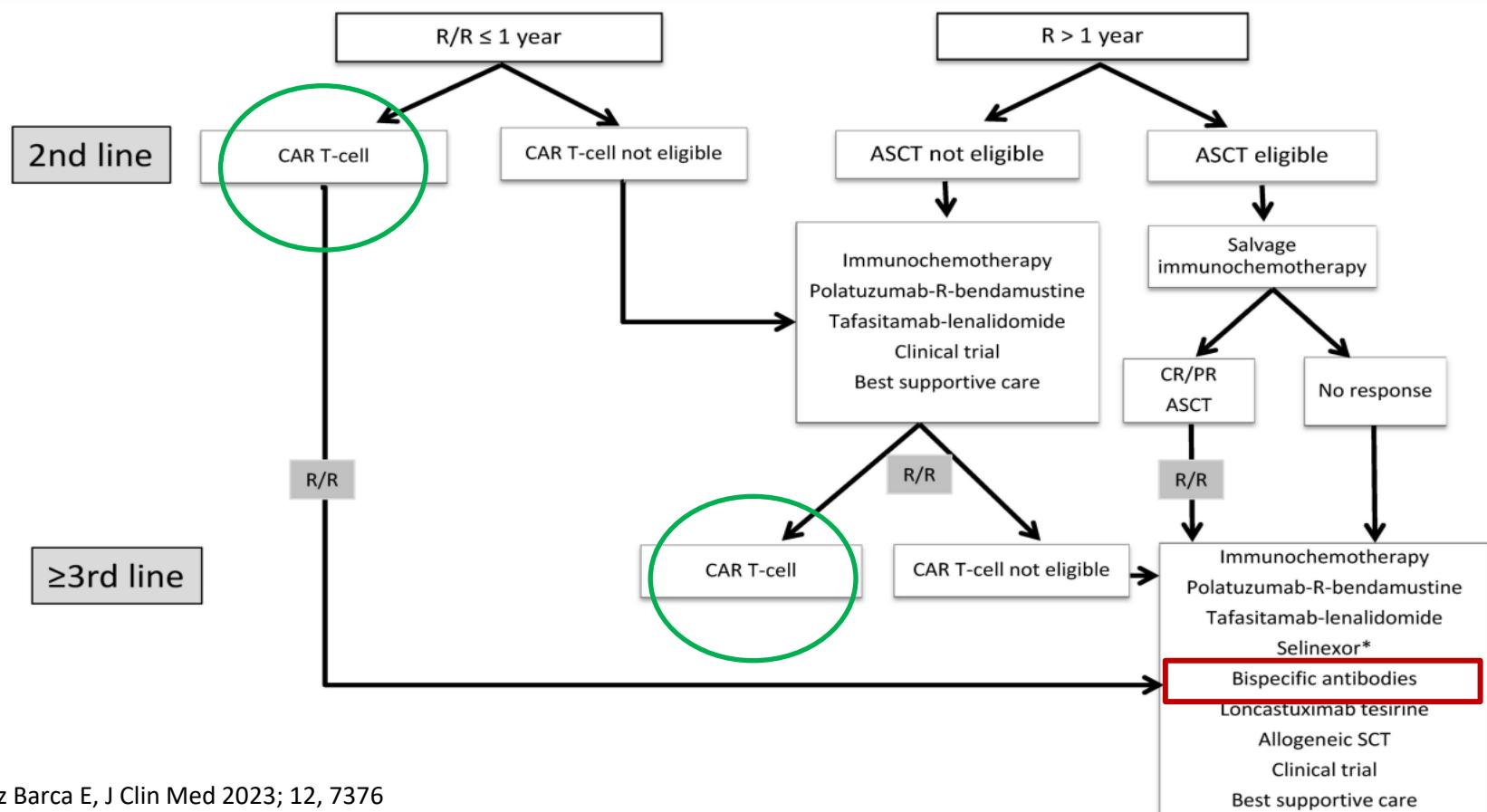
Eva González Barca
Unidad de Linfomas
Servicio de Hematología
Instituto Catalán de Oncología Hóspitalet, Barcelona

14 noviembre 2024

Conflictos de Interés

- Consultancy: Janssen, Abbvie, Kiowa, Beigene, SOBI
- Speaker: Janssen, Abbvie, Takeda, Astra-Zeneca, Lilly
- Travel: Janssen, Abbvie, AstraZeneca

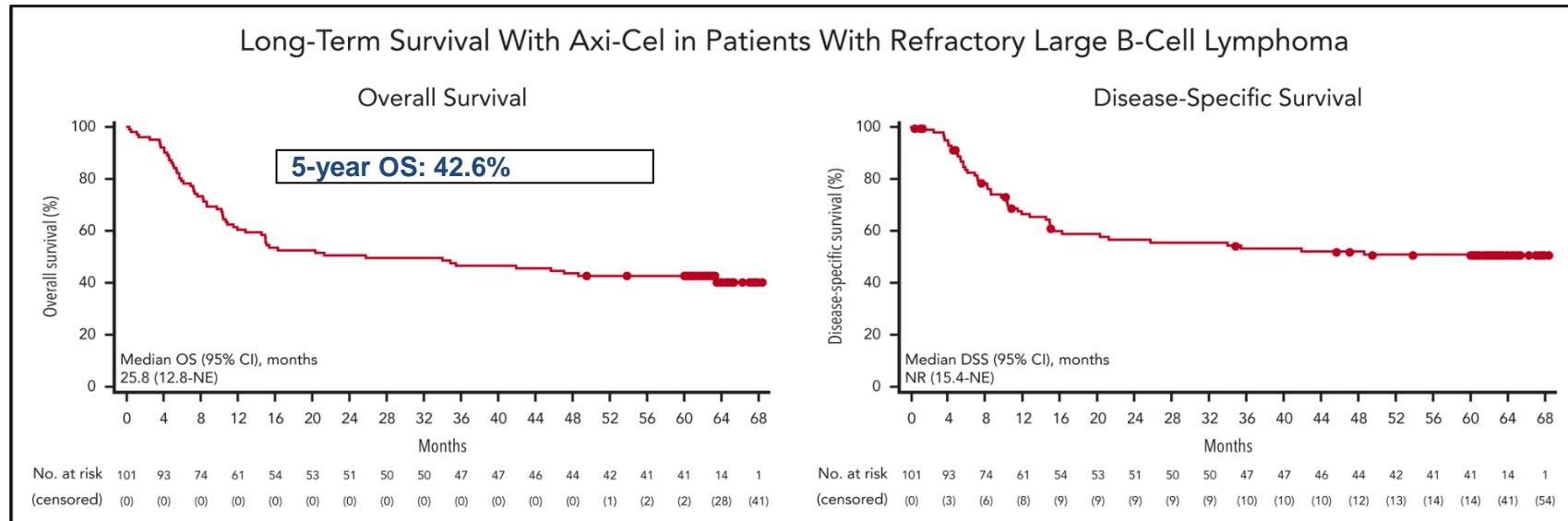
Algorithm for the treatment of relapsed/refractory diffuse large B-cell lymphoma patients



Datos de CART en 3ra linea o
posteriores y de CARTs en segunda
linea

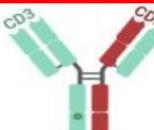
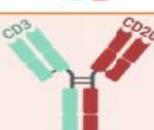
Zuma-1. Axicabtagene Ciloleucel CAR T-Cell Therapy in Refractory Large B-Cell Lymphoma

Overall survival at 5 years: long-lasting responses.



Nuevas opciones:
el futuro parece la inmunoterapia!

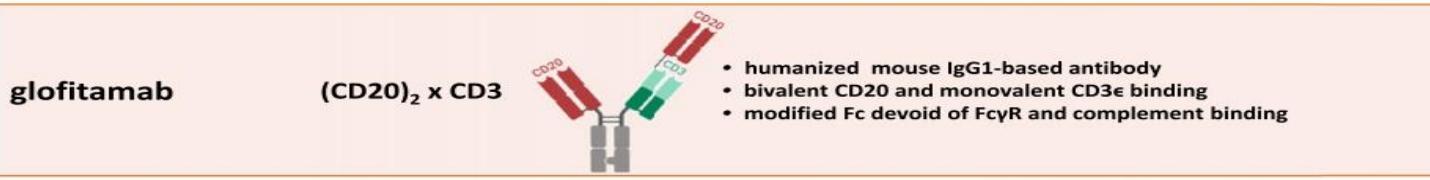
Anticuerpos biespecíficos

Bi-Specific Antibody	Targets	Design	Ig Fragment Formats
blinatumomab	CD19 x CD3		<ul style="list-style-type: none">• two murine scFv joined by a glycine-serine linker• monovalent CD19 and monovalent CD3 binding• cloned from anti-CD19 (clone HD37) and anti-CD3 (clone L2K-07) murine mAbs
mosunetuzumab	CD20 x CD3		<ul style="list-style-type: none">• humanized mouse heterodimeric IgG1-based antibody• monovalent CD20 and monovalent CD3ε binding• modified Fc devoid of FcγR and complement binding
glofitamab	(CD20) ₂ x CD3		<ul style="list-style-type: none">• humanized mouse IgG1-based antibody• bivalent CD20 and monovalent CD3ε binding• modified Fc devoid of FcγR and complement binding
odronextamab	CD20 x CD3		<ul style="list-style-type: none">• fully human IgG4-based heterodimeric antibody• monovalent CD20 and monovalent CD3ε binding• Fc-dependent effector function-minimized antibody with Fc of the anti-CD3ε heavy chain modified to reduce Protein A binding• common κ light chain from anti-CD3ε mAb
epcoritamab	CD20 x CD3		<ul style="list-style-type: none">• humanized mouse IgG1-based heterodimeric antibody• monovalent CD20 and monovalent CD3 binding• IgG1 Fc modified to minimize Fc-dependent effector functions and to control Fab-arm exchange of mAb half-molecules, resulting in high bispecific product yield

Glofitamab, a Novel, Bivalent CD20-Targeting T-Cell–Engaging Bispecific Antibody, Induces Durable Complete Remissions in Relapsed or Refractory B-Cell Lymphoma: A Phase I Trial

Martin Hutchings, PhD¹; Franck Morschhauser, MD, PhD²; Gloria Iacoboni, MD^{3,4}; Carmelo Carlo-Stella, MD⁵; Fritz C. Offner, MD, PhD⁶; Anna Sureda, MD, PhD⁷; Gilles Salles, MD⁸; Joaquin Martínez-Lopez, MD, PhD, MBA⁹; Michael Crump, MD¹⁰; Denise N. Thomas, MSc¹¹; Peter N. Morcos, PharmD¹¹; Cristiano Ferlini, MD¹¹; Ann-Marie E. Bröske, PhD¹²; Anton Belousov, PhD¹³; Marina Bacac, PhD¹³; Natalie Dimier, PhD¹⁴; David J. Carlile, PhD¹⁴; Linda Lundberg, PhD¹⁵; David Perez-Callejo, MD, PhD¹⁵; Pablo Umaña, PhD¹³; Tom Moore, MD¹²; Martin Weisser, MD¹²; and Michael J. Dickinson, MBBS, DMedSci¹⁶

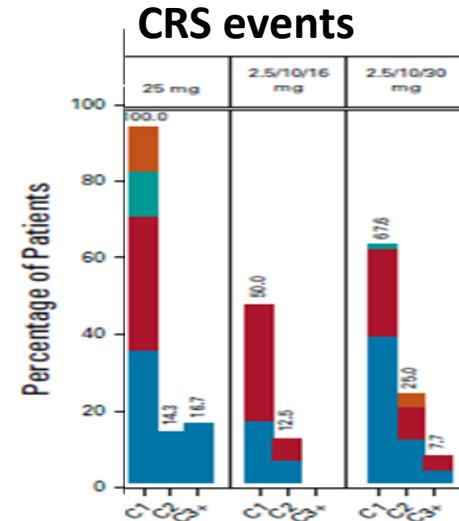
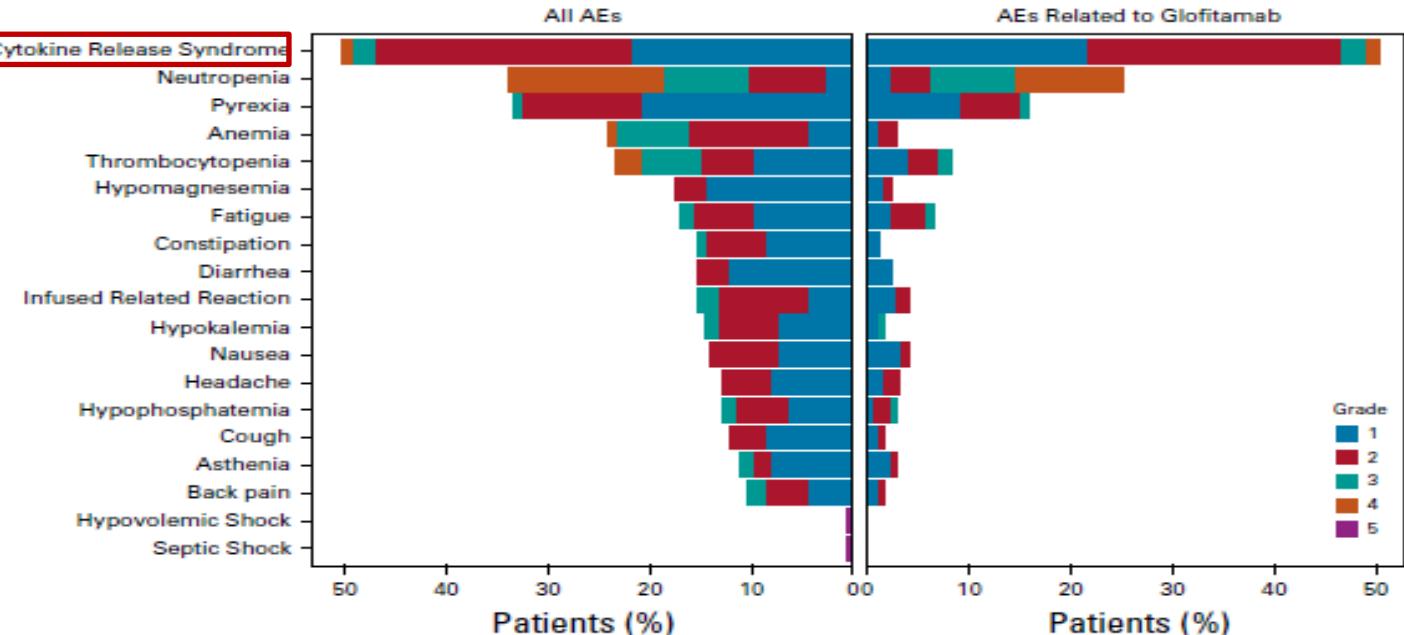
J Clin Oncol 2021;39:1959-1970



Glofitamab was given 21-day cycles up to 12 cycles.

- Dose escalation was guided by a Bayesian-modified continuous reassessment method with overdose control
- 2.5 mg (C1D1), 10 mg (C1D8), and 16/30 mg (C2D1)
- Seven days before 1,000 mg obinutuzumab to deplete peripheral and tissue based B cells and mitigate serious AE.

PRIMARY OBJECTIVE: MTD and SAFETY



ICAN:

- 8 / 171 (4.8%), grade 3: 2 (1.8%); no grade 4-5
- All transient 3-72h

Response and survival

Aggressive NHL

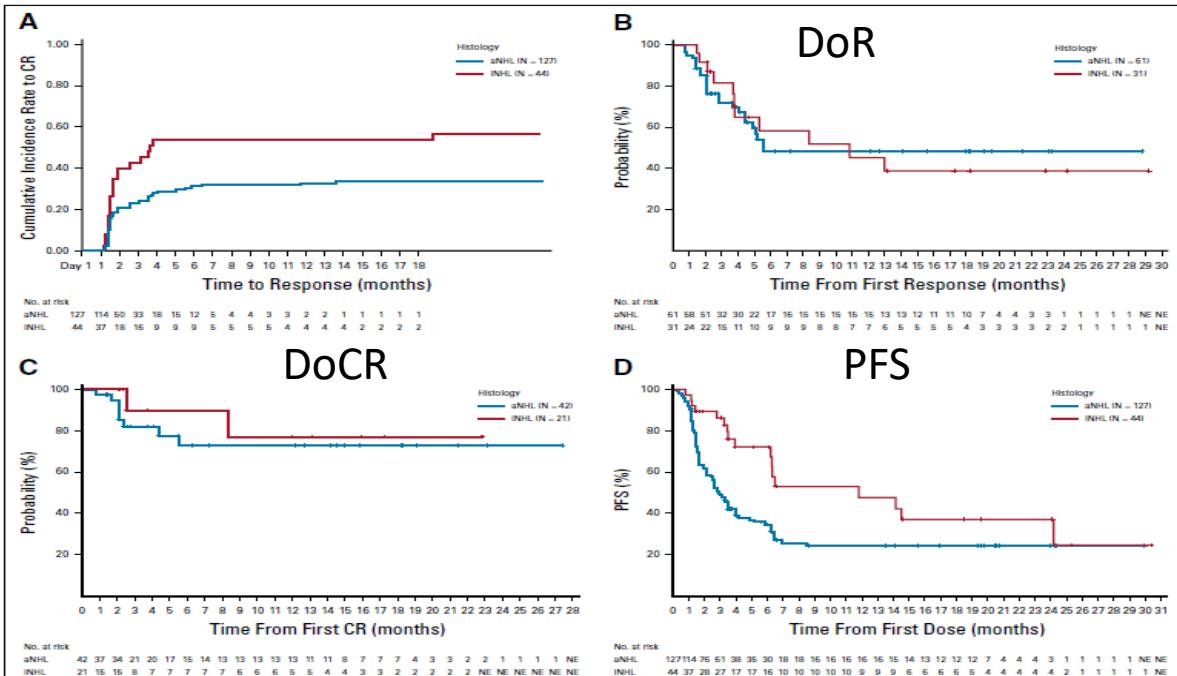
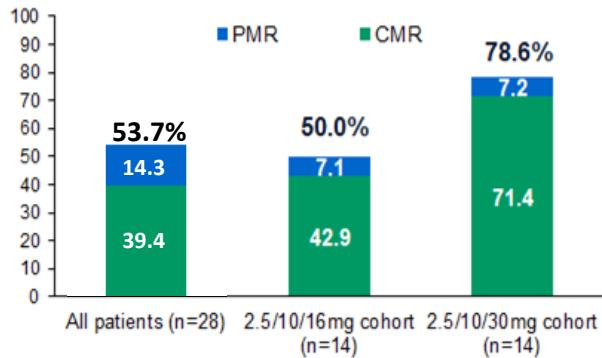


FIG 3. (A) Represents the cumulative incidence of time to CR. Kaplan-Meier curves for (B) DOR (PR and CR), (C) duration of CR, and (D) PFS. aNHL, aggressive non-Hodgkin lymphoma; CR, complete response; DOR, duration of response; iNHL, indolent non-Hodgkin lymphoma; NE, not estimable; PFS, progression-free survival; PR, partial response.

ORIGINAL ARTICLE

Glofitamab for Relapsed or Refractory Diffuse Large B-Cell Lymphoma

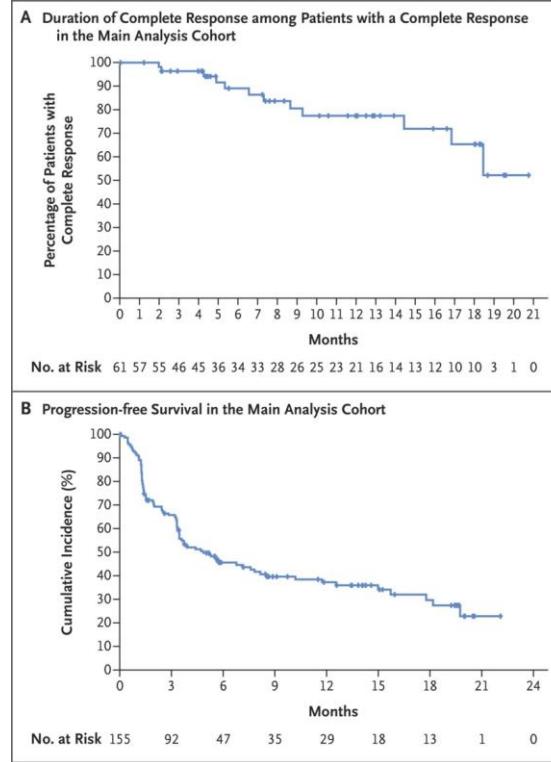
Michael J. Dickinson, M.B., B.S., D.Med.Sc., Carmelo Carlo-Stella, M.D., Franck Morschhauser, M.D., Ph.D., Emmanuel Bachy, M.D., Ph.D., Paolo Corradini, M.D., Gloria Iacoboni, M.D., Cyrus Khan, M.D., Tomasz Wróbel, M.D., Fritz Offner, M.D., Ph.D., Marek Trněný, M.D., Shang-Ju Wu, M.D., Ph.D., Guillaume Cartron, M.D., Ph.D., Mark Hertzberg, M.B., B.S., Ph.D., Anna Sureda, M.D., Ph.D., David Perez-Callejo, Ph.D., Linda Lundberg, Ph.D., James Relf, M.D., Mark Dixon, M.Sc., Emma Clark, M.Sc., Kathryn Humphrey, B.Sc., and Martin Hutchings, M.D., Ph.D.

Demographic and clinical characteristics at baseline of all 155 patients treated at the Phase 2

Characteristic	Value
Median age (range) — yr	66 (21–90)
Male sex — no. (%)	100 (65)
ECOG performance-status score — no. (%)†	
0	69 (45)
1	84 (55)
Previous lines of therapy	
Median no. of lines (range)	3 (2–7)
Only 2 previous lines — no. (%)	62 (40)
≥3 previous lines — no. (%)	92 (60)
Previous therapy for lymphoma — no. (%)	
Anti-CD20 antibody	154 (100)
Anthracycline	149 (97)
CAR T-cell therapy	51 (33)
Autologous stem-cell transplantation — no. (%)	28 (18)
Relapsed or refractory status — no. (%)‡	
Refractory to any previous therapy	139 (90)
Refractory to last previous therapy	132 (86)
Primary refractory	90 (58)
Refractory to any previous anti-CD20 therapy	128 (83)
Refractory to previous CAR T-cell therapy	46 (30)

Response and survival

Assessment According to Independent Review Committee (N=155)	
Outcome	
Complete response	
No. of patients with response	61
Percentage of patients (95% CI)	39 (32–48)
Objective response	
No. of patients with response	80
Percentage of patients (95% CI)	52 (43–60)
Duration of complete response†	
Median (95% CI) — mo	NR (16.8–NR)
Complete response at 12 mo (95% CI) — %	78 (64–91)
Duration of objective response‡	
Median (95% CI) — mo	18.4 (13.7–NR)
Objective response at 12 mo (95% CI) — %	64 (51–76)
Median time to first complete response (range) — days†	42 (31–308)
Progression-free survival	
Median (95% CI) — mo	4.9 (3.4–8.1)
Alive without progression at 12 mo (95% CI) — %	37 (29–46)
Overall survival	
Median (95% CI) — mo	—
Alive at 12 mo (95% CI) — %	—



Indicado para el tratamiento de pacientes adultos con linfoma B de célula grande en recaída o refractario después de dos o más líneas de tratamiento sistémico

Dose escalation of subcutaneous epcoritamab in patients with relapsed or refractory B-cell non-Hodgkin lymphoma: an open-label, phase 1/2 study

Martin Hutchings, Rogier Mous, Michael Roost Clausen, Peter Johnson, Kim M Linton, Martine E D Chamuleau, David John Lewis, Anna Sureda Balari, David Cunningham, Roberto S Oliveri, Brian Elliott, Dena DeMarco, Ada Azaryan, Christopher Chiu, Tommy Li, Kuo-mei Chen, Tahamtan Ahmadi, Pieterella J Lugtenburg

Lancet 2021; 398: 1157–69

epcoritamab

CD20 x CD3



- humanized mouse IgG1-based heterodimeric antibody
- monovalent CD20 and monovalent CD3 binding
- IgG1 Fc modified to minimize Fc-dependent effector functions and to control Fab-arm exchange of mAb half-molecules, resulting in high bispecific product yield

Subcutaneous epcoritamab (1 mL) was administered in 28-day cycles until disease progression or unacceptable toxicity. Doses escalated.

Weekly dosing in cycles 1 and 2 (days 1, 8, 15, 22)

Every 2 weeks in cycles 3–6 (days 1, 15)

Every 4 weeks from cycle 7 onward

	Relapsed or refractory diffuse large B-cell lymphoma (n=46)	Relapsed or refractory follicular lymphoma (n=12)	All patients (n=68)*
Age, years	68 (55-74)	73 (63-76)	68 (57-75)
Sex			
Female	16 (35%)	4 (33%)	23 (34%)
Male	30 (65%)	8 (67%)	45 (66%)
ECOG performance status			
0	23 (50%)	6 (50%)	35 (51%)
1	21 (46%)	4 (33%)	29 (43%)
2	2 (4%)	1 (8%)	3 (4%)
3†	0	1 (8%)†	1 (1%)†
Ann Arbor stage			
I	3 (7%)	0	3 (4%)
II	5 (11%)	4 (33%)	12 (18%)
III	12 (26%)	4 (33%)	16 (24%)
IV	26 (57%)	4 (33%)	37 (54%)
Extranodal disease	29 (63%)	6 (50%)	42 (62%)
Time since diagnosis, months	25·4 (11·0-54·6)	61·5 (34·3-153·1)	29·7 (13·7-66·8)
Time since relapse or progression, months	1·5 (1·1-2·3)	1·6 (1·2-2·6)	1·6 (1·1-2·3)
Number of lines of previous therapy	3·0 (2·0-4·0)	4·5 (2·5-8·0)	3·0 (2·0-4·5)
Previous therapies			
Anti-CD20 monoclonal antibody	46 (100%)	12 (100%)	68 (100%)
Anthracyclines	46 (100%)	9 (75%)	62 (91%)
Alkylating agents	46 (100%)	12 (100%)	67 (99%)
Autologous stem-cell transplantation	7 (15%)	1 (8%)	10 (15%)
CAR-T therapy	5 (11%)	0	6 (9%)
Treatment-refractory patients by therapy			
Last line of systemic therapy	41 (89%)	10 (83%)	58 (85%)
Alkylating agents	40 (87%)	9 (75%)	56 (82%)
Last anti-CD20 monoclonal antibody	41 (89%)	10 (83%)	59 (87%)

PRIMARY OBJECTIVE: MTD and SAFETY

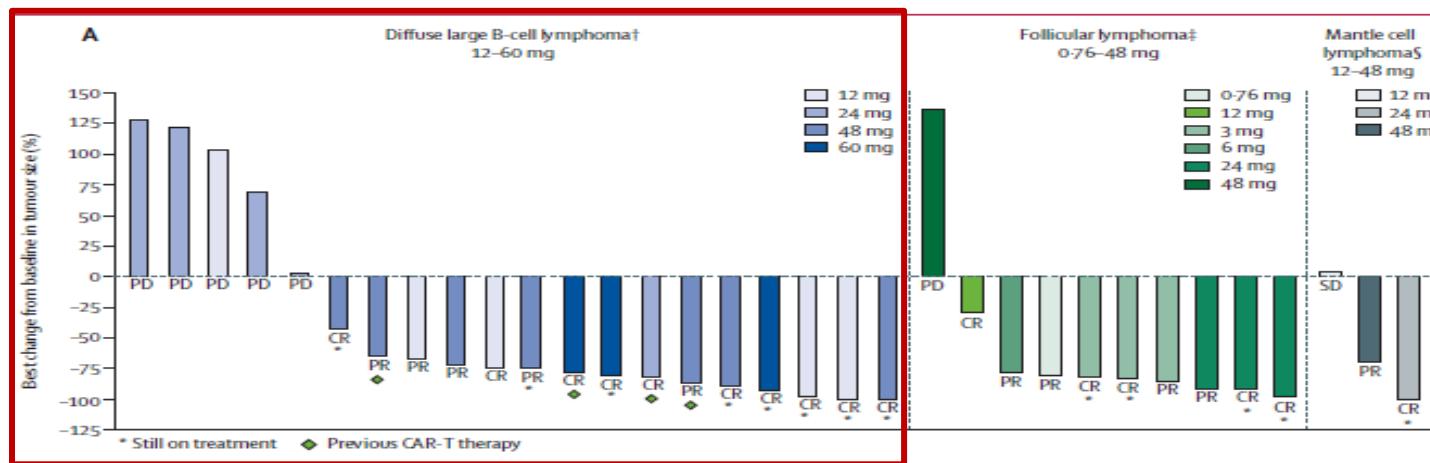
	Grade 1-2	Grade 3	Grade 4
Pyrexia*	43 (63%)	4 (6%)	0
Cytokine release syndrome	40 (59%)	0	0
Injection site reaction	32 (47%)	0	0
Fatigue	26 (38%)	4 (6%)	0
Diarrhoea	18 (26%)	0	0
Hypotension*	17 (25%)	4 (6%)	0
Dyspnoea	16 (24%)	0	1 (1%)
Tachycardia*	14 (21%)	0	0
Anaemia	7 (10%)	9 (13%)	0

*Most pyrexia, hypotension, and tachycardia events were associated with cytokine release syndrome.

Table 2: Treatment-emergent adverse events that occurred in at least 20% of the full analysis population (n=68)

ICAN: 4 (8%), grade 3: 2 (4%), no grade 4-5, all transient, median duration 3 days

	Relapsed or refractory diffuse large B-cell lymphoma*			Relapsed or refractory follicular lymphoma†		Relapsed or refractory mantle cell lymphoma‡	
	12–60 mg (n=22)	48 mg (n=8)	60 mg (n=3)	0·76–48 mg (n=10)	48 mg (n=1)	0·76–48 mg (n=4)§	48 mg (n=1)
Overall response, n (%, 95% CI)	15 (68%, 45–86)	7 (88%, 47–100)	3 (100%, 29–100)	9 (90%, 55–100)	0 (0, 0–98)	2 (50%, 7–93)	1 (100%, 3–100)
Complete response	10 (45%)	3 (38%)	3 (100%)	5 (50%)	0	1 (25%)	0
Partial response	5 (23%)	4 (50%)	0	4 (40%)	0	1 (25%)	1 (100%)
Stable disease	1 (5%)	0	0	0	0	1 (25%)	0
Progressive disease	5 (23%)	0	0	1 (10%)	1 (100%)	0	0
Time to response, months	1·4 (1·3–2·6)	1·4 (1·3–2·6)	1·3 (1·1–1·4)	1·9 (1·5–3·5)	NA	1·4 (1·3–1·5)	1·3 (1·3–1·3)
Follow-up duration, months	9·3 (8·2–14·8)	8·2 (7·4–9·9)	9·2 (9·2–9·3)	13·6 (10·4–16·5)	6·6 (6·6–6·6)	10·2 (7·7–10·5)	7·7 (7·7–7·7)



Epcoritamab, a Novel, Subcutaneous CD3xCD20 Bispecific T-Cell–Engaging Antibody, in Relapsed or Refractory Large B-Cell Lymphoma: Dose Expansion in a Phase I/II Trial

Characteristic	Patients (N = 157)
Age, years, median (range)	64 (20-83)
Central laboratory FISH analysis: Double-hit/triple-hit lymphoma (<i>MYC</i> and <i>BCL2</i> and/or <i>BCL6</i> rearrangement), No./n (%)	13/99 (13.1)
Ann Arbor stage, No. (%)	
I/II	39 (24.8)
III	21 (13.4)
IV	97 (61.8)
International Prognostic Index, No. (%)	
0-2	55 (35.0)
≥ 3	82 (52.2)
Unknown	2 (1.3)

Characteristic	Patients (N = 157)
Prior lines of antilymphoma therapy, No. (%)	
2	46 (29.3)
3	50 (31.8)
≥ 4	61 (38.9)
Primary refractory disease, ^c No. (%)	96 (61.1)
Refractory to last systemic therapy, ^c No. (%)	130 (82.8)
Refractory to ≥ 2 consecutive lines of therapy, ^c No. (%)	119 (75.8)
Prior autologous stem-cell transplant, No. (%)	31 (19.7)
Relapsed within 12 months after prior autologous stem-cell transplant, No./n (%)	18/31 (58.1)
Prior CAR T-cell therapy, No. (%)	61 (38.9)
Progressed within 6 months of CAR T-cell therapy, No./n (%)	46/61 (75.4)
Prior anthracycline therapy, No. (%)	154 (98.1)
First line	139 (88.5)
Second line	16 (10.2)

Response and survival

0.16-mg on day 1, 0.8-mg day 8, and subsequent full 48-mg doses on day 15

Response rate

ORR 99 (63.1%)

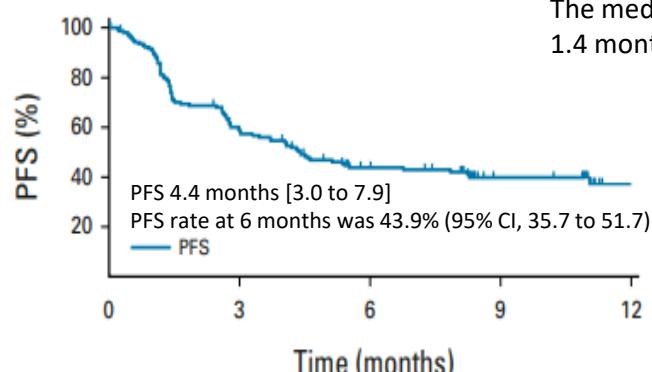
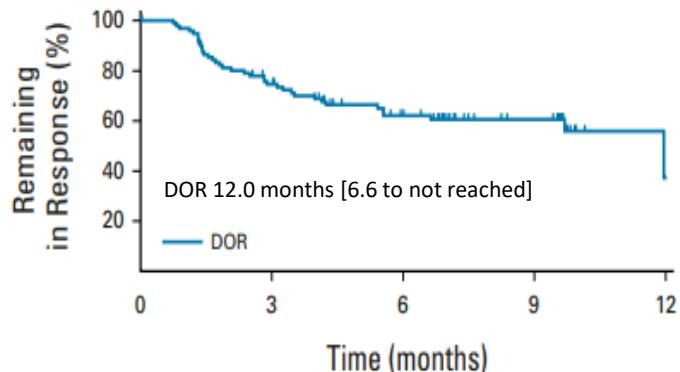
CR 61 (38.9%)

PR 38 (24.2%)

SD 5 (3.2%)

PD 37 (23.6%)

NE 16 (10.2%)



The median time to response was 1.4 months (range, 1.0-8.4).

OS Not reached
[11.3 to not reached]

Indicado para el tratamiento de pacientes adultos con linfoma B de célula grande en recaída o refractario después de dos o más líneas de tratamiento sistémico

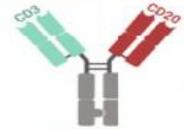
Single-Agent Mosunetuzumab Shows Durable Complete Responses in Patients With Relapsed or Refractory B-Cell Lymphomas: Phase I Dose-Escalation Study

Lihua E. Budde, MD¹; Sarit Assouline, MD²; Laurie H. Sehn, MD³; Stephen J. Schuster, MD⁴; Sung-Soo Yoon, MD, PhD⁵; Dok Hyun Yoon, MD, PhD⁶; Matthew J. Matasar, MD⁷; Francesc Bosch, MD, PhD⁸; Won Seog Kim, MD, PhD⁹; Loretta J. Nastoupil, MD¹⁰; Ian W. Flinn, MD, PhD¹¹; Mazyar Shadman, MD, MPH¹²; Catherine Diefenbach, MD¹³; Carol O'Hear, MD, PhD¹⁴; Huang Huang, MSc¹⁵; Antonia Kwan, MBBS, PhD¹⁴; Chi-Chung Li, PhD¹⁴; Emily C. Piccione, PhD¹⁴; Michael C. Wei, MD, PhD¹⁴; Shen Yin, PhD¹⁴; and Nancy L. Bartlett, MD¹⁶

J Clin Oncol 2021;40:481-491

mosunetuzumab

CD20 x CD3



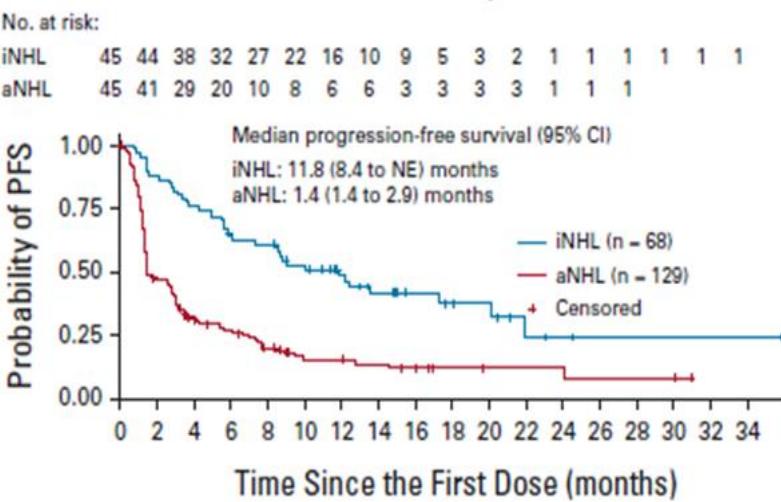
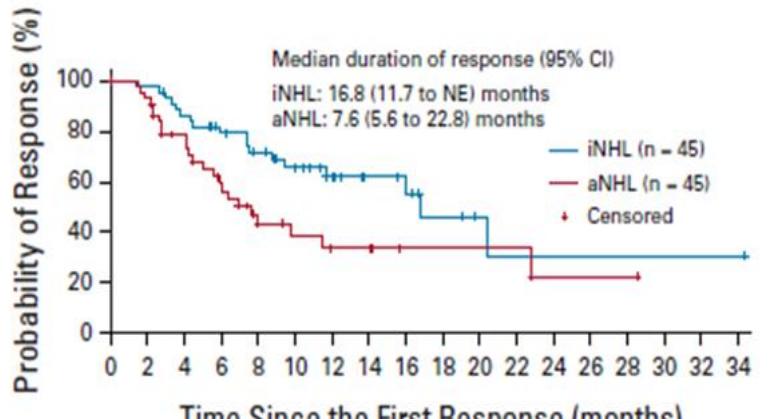
- humanized mouse heterodimeric IgG1-based antibody
- monovalent CD20 and monovalent CD3e binding
- modified Fc devoid of FcγR and complement binding

Mosunetuzumab was given 21-day cycles up to 8 cycles for patients with a CR and 17 cycles for those with PR or SD.

- In group A, mosunetuzumab was administered intravenously on day 1 of each 21-day cycle.
- **In group B**, mosunetuzumab was administered intravenously as low and intermediate step-up doses on days 1 and 8 of cycle 1, with the target dose on day 15 and on day 1 of subsequent 21-day cycles.

Response and survival

	Mosunetuzumab NCT02500407 Ph 1/1b (dose escalation / expansion)	
Patients	129 aNHL	68 iNHL
Prior LoT, median		
Refractory to last therapy	3 (1-14)	3 (1-11)
Prior CAR T-cell therapy	106 (82%)	43 (63%)
	15 (12%)	4 (6%)
ORR / CR	34.9% / 19.4%	66.2% / 48.5%
Prior CART ORR / CR	36.8% / 26.3%	



No. at risk:
iNHL 45 44 38 32 27 22 16 10 9 5 3 2 1 1 1 1 1 1
aNHL 45 41 29 20 10 8 6 6 3 3 3 3 1 1 1

No. at risk:
iNHL 68 59 51 42 40 29 22 17 10 8 7 3 2 1 1 1 1 1
aNHL 129 58 35 29 20 11 11 9 7 4 3 3 3 2 2 2 2 0 0

Odronextamab, a human CD20 \times CD3 bispecific antibody in patients with CD20-positive B-cell malignancies (ELM-1): results from the relapsed or refractory non-Hodgkin lymphoma cohort in a single-arm, multicentre, phase 1 trial

Rajat Bannerji, Jon E Arnason, Ranjana H Advani, Jennifer R Brown, John N Allan, Stephen M Ansell, Jeffrey A Barnes, Susan M O'Brien, Julio C Chávez, Johannes Duell, Andreas Rosenwald, Jennifer L Crombie, Melanie Ufkin, Jingjin Li, Min Zhu, Srikanth R Ambati, Aafia Chaudhry, Israel Lowy, Max S Topp

Lancet Haematol 2022; 9(5):e327-e339

odronextamab

CD20 \times CD3



- fully human IgG4-based heterodimeric antibody
- monovalent CD20 and monovalent CD3 ϵ binding
- Fc-dependent effector function-minimized antibody with Fc of the anti-CD3 ϵ heavy chain modified to reduce Protein A binding
- common κ light chain from anti-CD3 ϵ mAb

Intravenous odronektamab every 2 weeks until disease progression or unacceptable toxicity

- Step-up dosing schedule in cycle 1
- Once per week at target doses ranging from 0.1 mg to 320 mg during cycles 2–4 on days 1, 8, and 15 (each cycle was 21 days).
- After cycle 4, maintenance treatment every 2 weeks.

Characteristics of the patients

	Total (n=145)
Age	
Median	67.0 (57.0–73.0)
≥65 years	86 (59%)
<65 years	59 (41%)
Sex	
Male	101 (70%)
Female	44 (30%)
B-cell non-Hodgkin lymphoma diagnosis	
Diffuse large B-cell lymphoma	85 (59%)
Follicular lymphoma grade 1–3a	40 (28%)
Mantle cell lymphoma	12 (8%)
Marginal zone lymphoma	6 (4%)
Other*	2 (1%)
Bulky disease according to investigator assessment	49 (34%)
Median previous lines of therapy	3 (2–5)
Previous autologous haematopoietic stem-cell transplantation	12 (8%)
Previous CAR T-cell therapy	42 (29%)†
Refractory to last line of therapy	119 (82%)
Relapsed after last line of therapy	15 (10%)
Refractory to anti-CD20 antibody in any line	123 (85%)
Refractory to alkylator therapy in any line	102 (70%)

Toxicity

	Grade 1 or 2	Grade 3	Grade 4	Grade 5
Pyrexia	105 (72%)	2 (1%)	0	0
Cytokine release syndrome	79 (54%)	9 (6%)	1 (1%)	0
Chills	67 (46%)	1 (1%)	0	0
Anaemia	19 (13%)	35 (24%)	1 (1%)	0
Thrombocytopenia*	20 (14%)	11 (8%)	9 (6%)	0
Headache	36 (25%)	0	0	0
Nausea	34 (23%)	2 (1%)	0	0
Infusion-related reaction	32 (22%)	3 (2%)	0	0
Neutropenia*	8 (6%)	13 (9%)	14 (10%)	0
Decreased appetite	31 (21%)	3 (2%)	0	0

ICAN

- 18 (12%): grade 3: 4 (3%); no grade 4–5
- All reversible, median 3 days

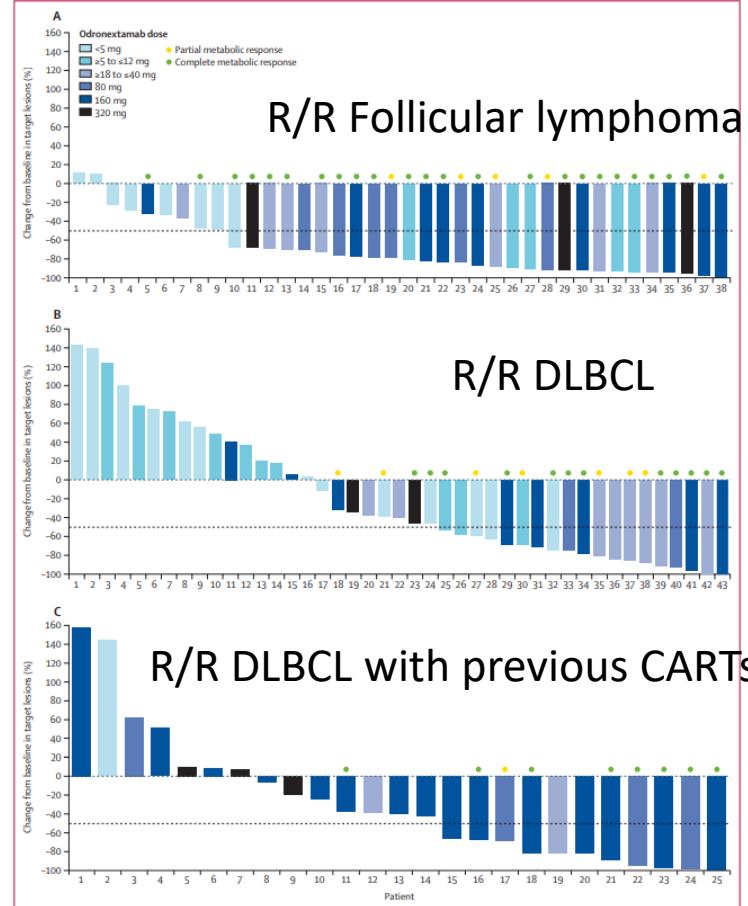
Response

	Relapsed or refractory follicular lymphoma grade 1-3a (n=40)	Relapsed or refractory diffuse large B-cell lymphoma without previous CART T-cell therapy (n=49)	Relapsed or refractory diffuse large B-cell lymphoma with previous CART T-cell therapy (n=33)
Objective response (complete or partial)	31 (78%; 61.5-89.2)	19 (39%; 25.2-53.8)	11 (33%; 18.0-51.8)
Best overall complete tumour response	25 (63%; 45.8-77.3)	12 (24%; 13.3-38.9)	8 (24%; 11.1-42.3)
Time to first response, months	1.2 (1.0-2.5)	1.4 (1.0-2.6)	1.1 (0.8-2.5)
Estimated duration of response, months	12.7 (95% CI 6.1-NE)	4.4 (95% CI 2.9-NE)	NR (95% CI 1.6-NE)
Estimated duration of complete response, months	14.5 (95% CI 8.8-NE)	NR (95% CI 4.0-NE)	NR (95% CI NE-NE)
Observed duration of complete response, months	9.9 (3.9-19.9)	10.3 (4.2-21.4)	7.4 (2.6-15.8)

DLBCL **> 80 mg ORR 53% / CR 53%**
DLBCL post CART **> 80 mg ORR 33% / CR 27%**

Recommended dose for expansion

- 80 mg in FL
- 160 mg in DLBCL



Open questions

	Bispecific antibodies	CARTs
Readily available	👍	
Fixed treatment	👍	
Outpatient Tx	👍	
Less CRS / ICAN - Step-up dosing - Pre tx anti CD20 - SC formulation	👍	
Less Infections	👍 ?	
Long-term efficacy	👍	
Higher probability of combinations	👍 ?	
Sequencing		👍
Less costs	👍 ?	

Open questions

	Bispecific antibodies	CARTs
Readily available	👍	
Fixed treatment	👍	
Outpatient Tx	👍	
Less CRS / ICAN - Step-up dosing - Pre tx anti CD20 - SC formulation	👍	
Less Infections	👍 ?	
Long-term efficacy	👍	
Higher probability of combinations	👍 ?	
Sequencing	👍	
Less costs	👍 ?	

Open questions

	Bispecific antibodies	CARTs
Readily available	👍	
Fixed treatment		👍
Outpatient Tx	👍	
Less CRS / ICAN - Step-up dosing - Pre tx anti CD20 - SC formulation	👍	
Less Infections	👍 ?	
Long-term efficacy	👍	
Higher probability of combinations	👍 ?	
Sequencing	👍	
Less costs	👍 ?	



Generalitat de Catalunya
Departament de Salut



<http://ico.gencat.cat>



@ICOnoticies



www.facebook.com/ICOnoticies

e.gonzalez@iconcologia.net

ICO l'Hospitalet
Hospital Duran i Reynals
Av. Granvia de l'Hospitalet, 199-203
08908 L'Hospitalet de Llobregat

ICO Badalona
Hospital Germans Trias i Pujol
Ctra. del Canyet s/n
08916 Badalona

ICO Girona
Hospital Doctor Trueta
Av. França s/n
17007 Girona

ICO Camp de Tarragona i Terres de l'Ebre
Hospital Joan XXIII
C. Dr. Mallafré Guasch, 4 43005 Tarragona
Hospital Verge de la Cinta
C. de les Esplanetes, 14 43500 Tortosa