

**The CIREL cohort: a prospective controlled registry studying the real-life use of irinotecan-loaded chemoembolisation in colorectal cancer liver metastases: First interim analysis.**

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Presented by Dr. Roberto Iezzi

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## Conflict of interest

- No conflict of interest to declare

## CIREL – Cirse REgistry for LifePearl microspheres:

- Multi-centre, non-randomized, observational study on real-life use of LifePearl microspheres loaded with irinotecan (LP-IRI) in colorectal cancer liver metastases.



> Dig Liver Dis. 2020 Aug;52(8):857-861. doi: 10.1016/j.dld.2020.05.051. Epub 2020 Jun 30.

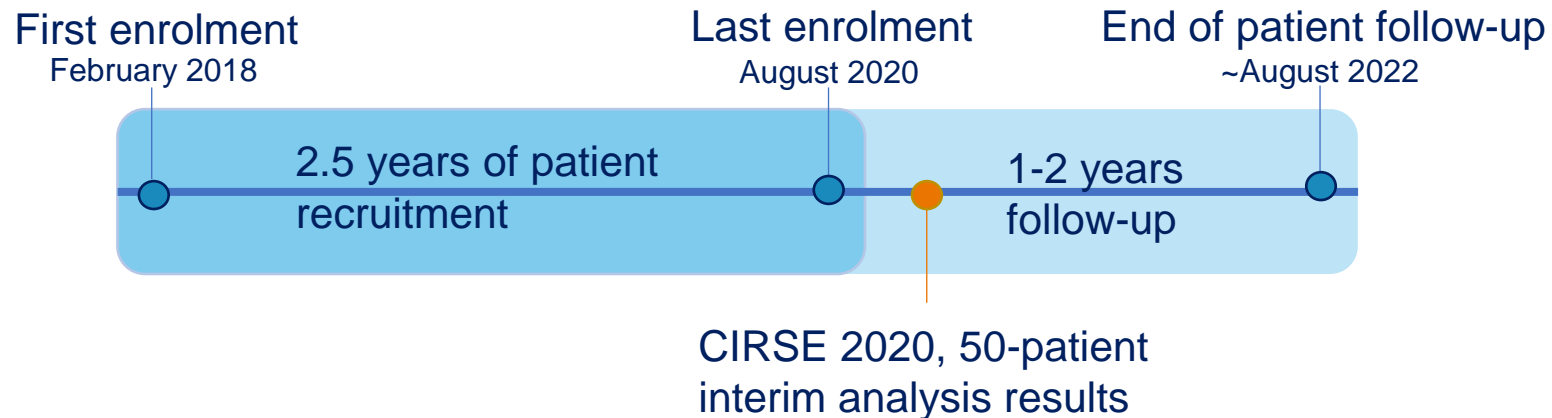
### A multicentre, international, observational study on transarterial chemoembolisation in colorectal cancer liver metastases: Design and rationale of CIREL

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## CIREL – Cirse REgistry for LifePearl microspheres:

### 50-patient interim analysis

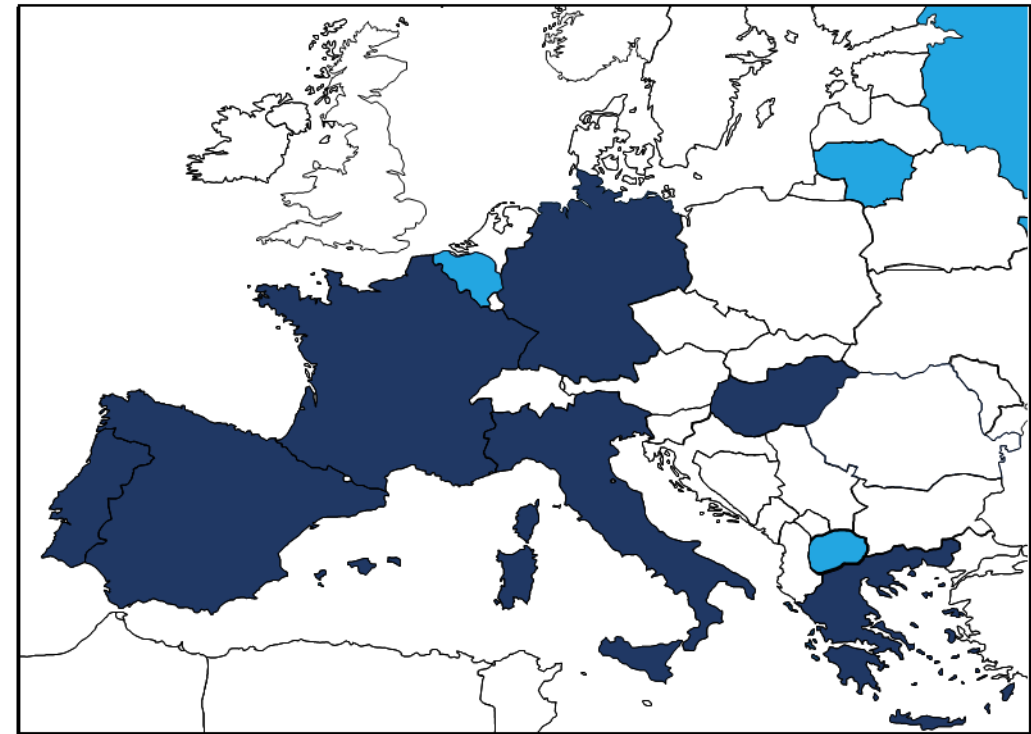
- Multi-centre, non-randomized, observational study on real-life use of LifePearl microspheres loaded with irinotecan (LP-IRI) in colorectal cancer liver metastases.
- Interim analysis focusing on feasibility, baseline, safety and quality of life.



## CIREL – Countries included in interim analysis

Country	Number of centres	Number of patients
Italy	2	15
Germany	2	11
Hungary	1	9
Greece	1	8
Portugal	1	5
France	1	1
Spain	1	1

Countries included in CIREL



■ Included in 50-patient interim analysis

## CIREL Objectives analysed for the interim analysis

- **Primary Objective**

The primary objective of CIREL is to **prospectively capture the real-life use** of LP IRI in colorectal cancer liver metastases by applying **predefined categories of treatment intention**.

- **Secondary Objectives**

<b>Secondary Objective</b>	<b>Measured according to</b>
1. Safety	• CTCAE 4.03 and 5.0
2. Quality of Life	• EORTC scoring manual v 3.0 for EORTC QLQ-C30

## Patient demographics and prior hepatic treatments



### 50 patients

- Male: 29 (58%)
- Median age: 66y
- Synchronous (<6 months): 34 (68%)
- Metachronous (>6 months): 16 (32%)
- ECOG:
  - 0: 36 (72%)
  - 1: 7 (14%)
  - 2: 3 (6%)

Prior treatments for liver metastases	n (%)
<b>Systemic chemotherapy</b>	<b>41 (82%)</b>
1 line	9 (18%)
2 lines	6 (12%)
3 or more lines	26 (52%)
<b>Targeted therapy</b>	<b>24 (48%)</b>
Anti-angiogenic targeted therapy	18 (36%)
Anti-EGFR targeted therapy	10 (20%)
<b>Surgery</b>	<b>10 (20%)</b>
Adjuvant fluoropyrimidine	2 (4%)
Adjuvant oxaliplatin	2 (4%)
Adjuvant irinotecan	2 (4%)
<b>Ablation</b>	<b>5 (10%)</b>
<b>Intra-arterial treatment</b>	<b>6 (12%)</b>

## Patient demographics and prior hepatic treatments

<b>Liver Metastases Characteristics</b>	<b>n (%)</b>
<b>Location</b>	
Whole Liver	26 (52%)
Left liver lobe only	7 (14%)
Right liver lobe only	17 (34%)
<b>Liver Tumor Burden</b>	
< 25%	33 (66%)
25-50%	13 (26%)
> 50%	4 (8%)
<b>Number of Lesions</b>	
1	8 (16%)
2-3	16 (32%)
4-10	15 (30%)
> 10	11 (22%)



## LP-IRI treatments' characteristic

129 treatment sessions	n (%)
<b>Unilobar treatment</b>	
Median number of sessions (min, max)	2 (1, 4)
Right lobe	39 (75%)
Left lobe	13 (25%)
<b>Bilobar treatment</b>	
Median number of sessions (min, max)	2,6 (1, 5)
Right lobe	45 (58%)
Left lobe	32 (42%)
<b>Bead Size</b>	
100	111 (86%)
>100	18 (14%)
<b>Treatment</b>	
Treatment technically successful	129 (100%)
Complete stasis	45 (36%)
Complete delivery of the dose	82 (64%)

## Treatment intentions of LP-IRI

Salvage treatment in  
progressive patients  
n=21



- Progressive disease
- Min 3 lines of systemic chemotherapy

♂ 76 yo  
**Unilobar Disease**  
**/Refractory to**  
**3 lines of CHT**

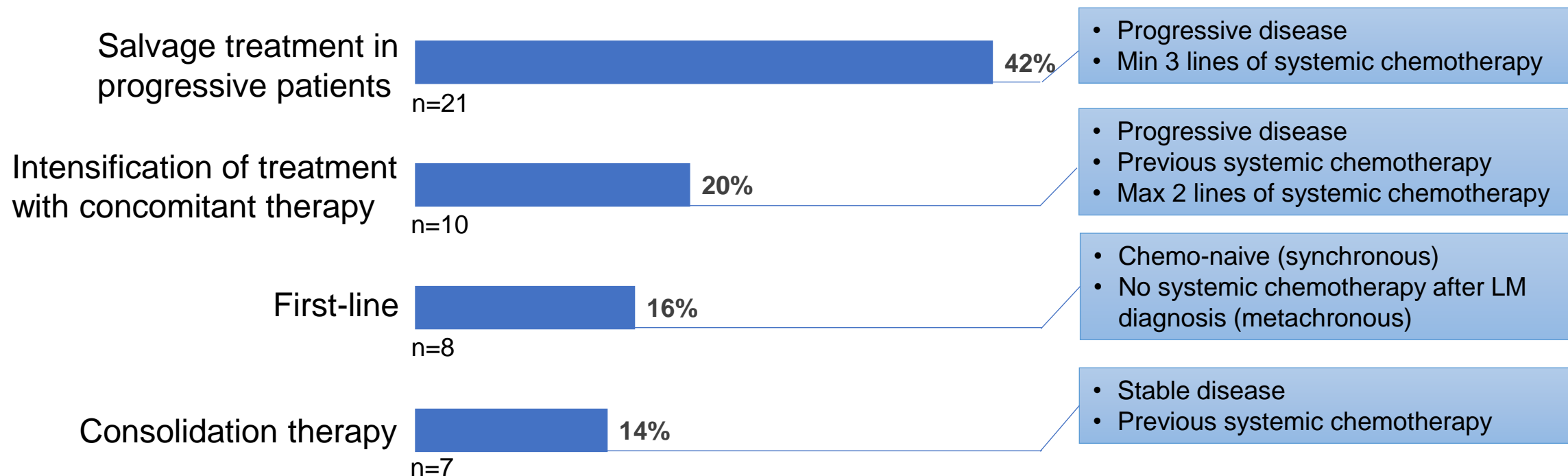


**Pre-treatment**



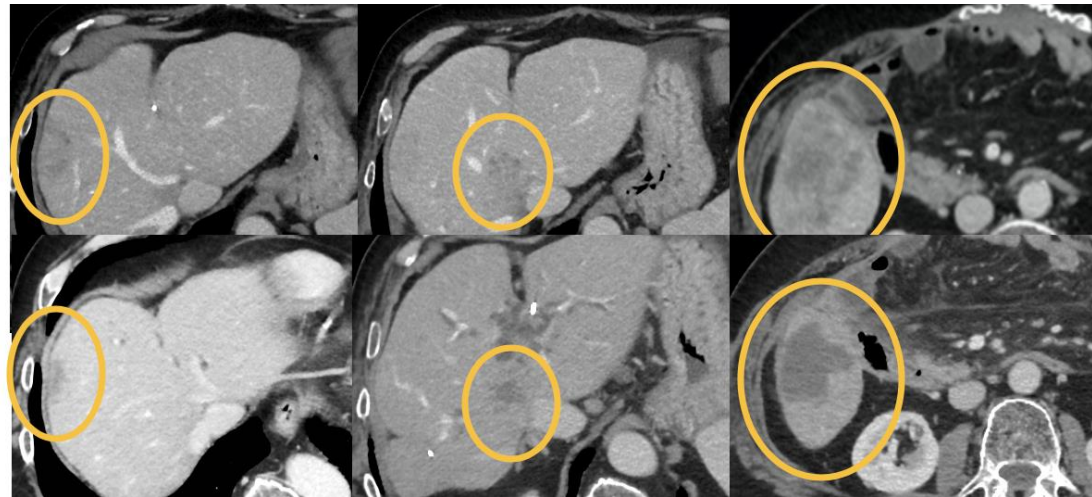
**6mo F-U**

## Treatment intentions of LP-IRI



## Treatment intentions of LP-IRI

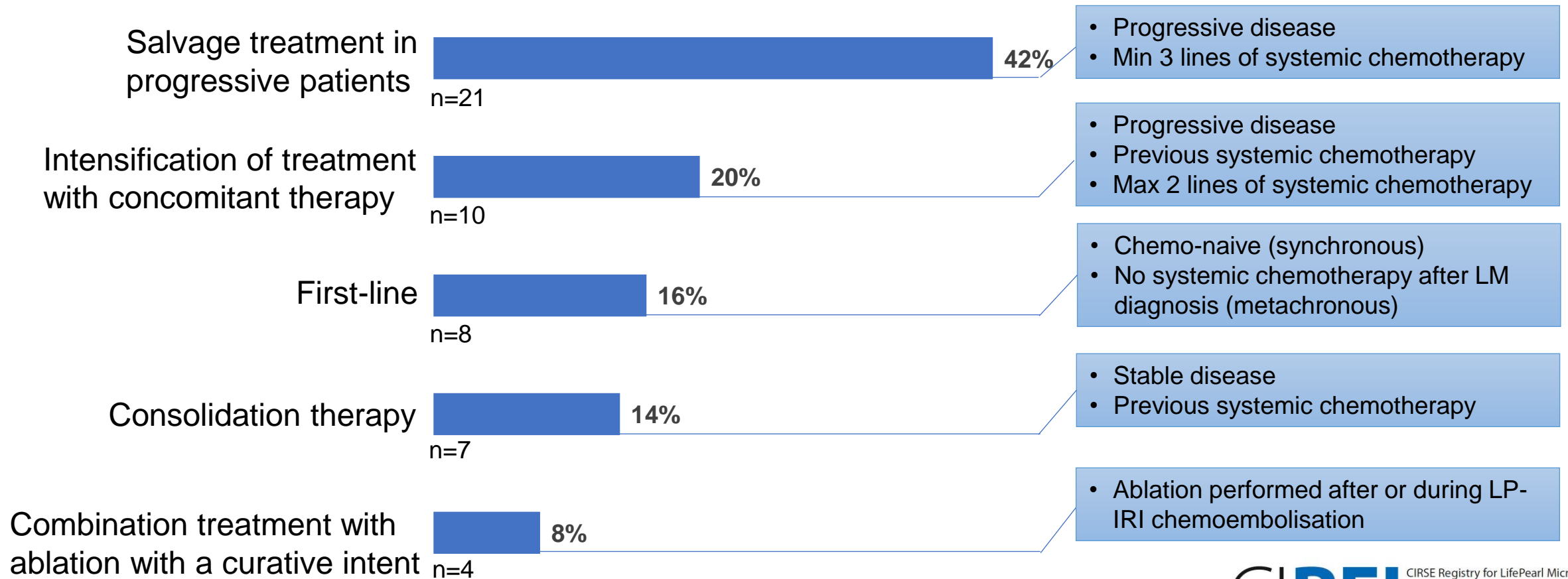
♀ **67yo SD > 3 months in 2-lines CHT asking for a ChemoHolidays/Break**



Consolidation therapy  14%  
n=7

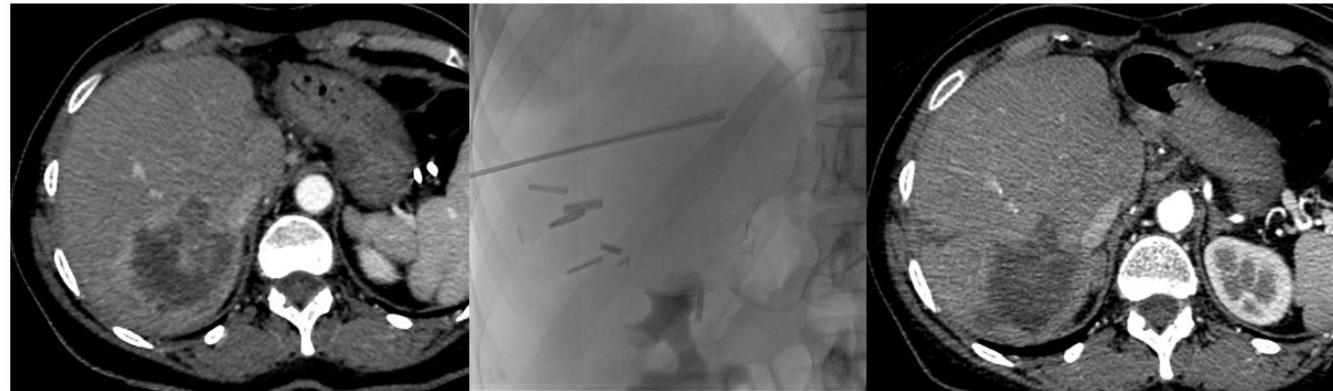
- Stable disease
- Previous systemic chemotherapy

## Treatment intentions of LP-IRI



## Treatment intentions of LP-IRI

***P.M.T. 68 yo ♀ -  
Unresectable  
mCRC (PD CHT)***



***Unresectable  
mCRC (Ø 6cm)***

***RFA &  
LP-IRI***

***F-U***

Combination treatment with  
ablation with a curative intent 8% n=4

- Ablation performed after or during LP-IRI chemoembolisation

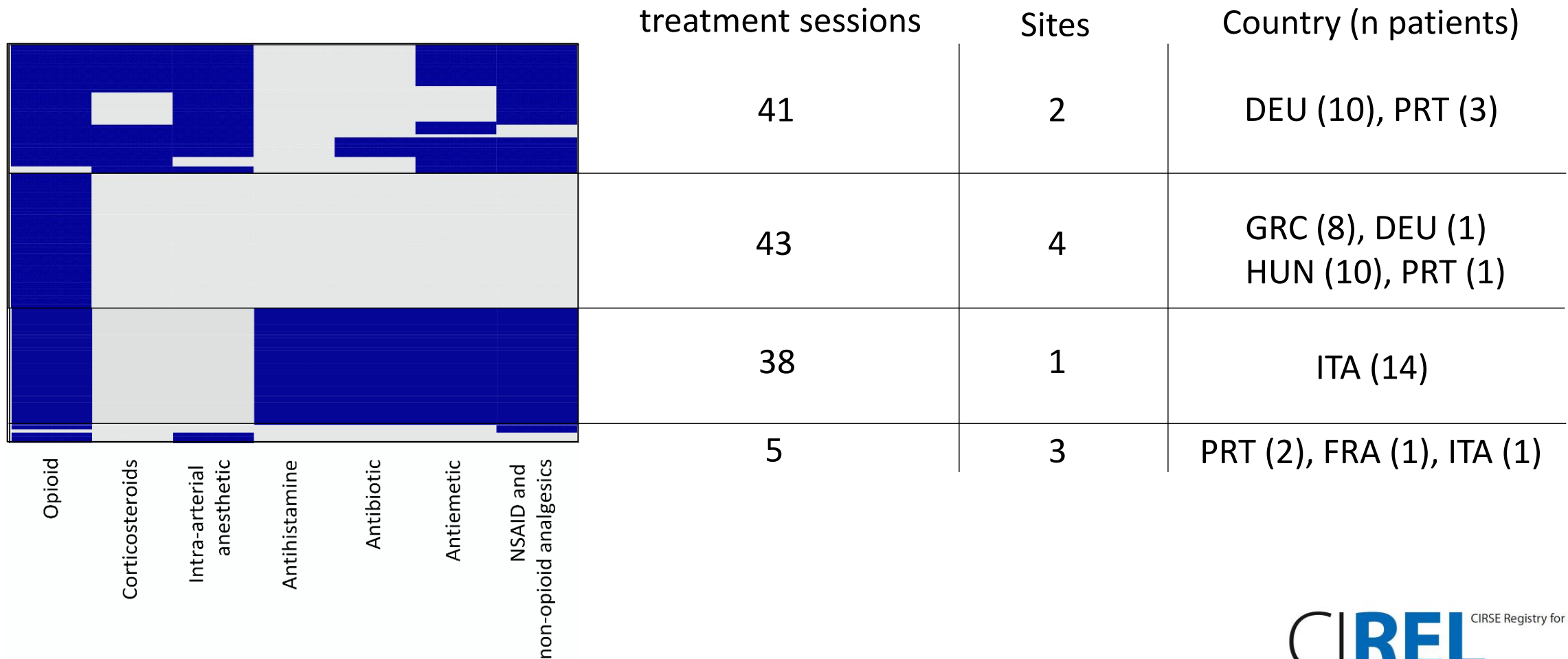
## Safety and toxicity

- 0% mortality in the first 30 days
- Most common AE: Grade 1-2 Post-embolization Syndrome (Pain)

	Peri- interventional	<30 days
Total AEs	33	24
Total grade 3 + 4 AEs	2	7
Patients with at least one AE (%)	13 (26%)	10 (20%)
Patients with at least one grade 3 + 4 AE (%)	2 (4%)	5 (10%)

Peri-interventional AEs	Grade 3	
Infusion related reaction	1	
Hypertension	1	
<30days	Grade 3	Grade 4
Hepatic failure	1	
Liver abscess	1	
Renal failure + hyperkalemia	1	
Blood bilirubin increase	1	
Infection, CRP increasing	1	
Sepsis		1
Colonic obstruction		1

## High variability in procedural medications

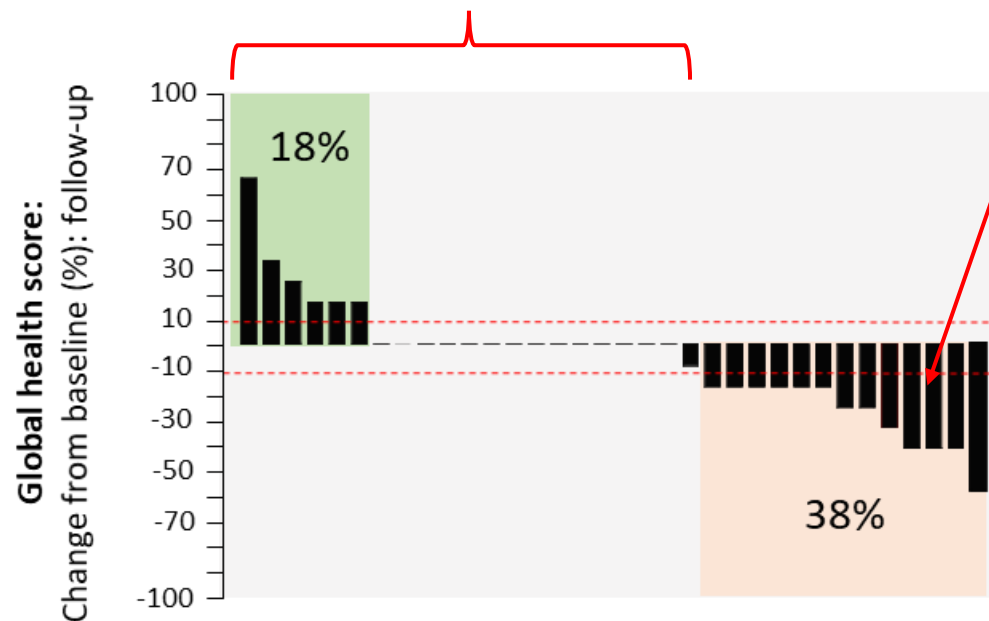




## Quality of Life mostly deteriorating in Salvage therapy patients

### Global health score

62% improving or remaining stable

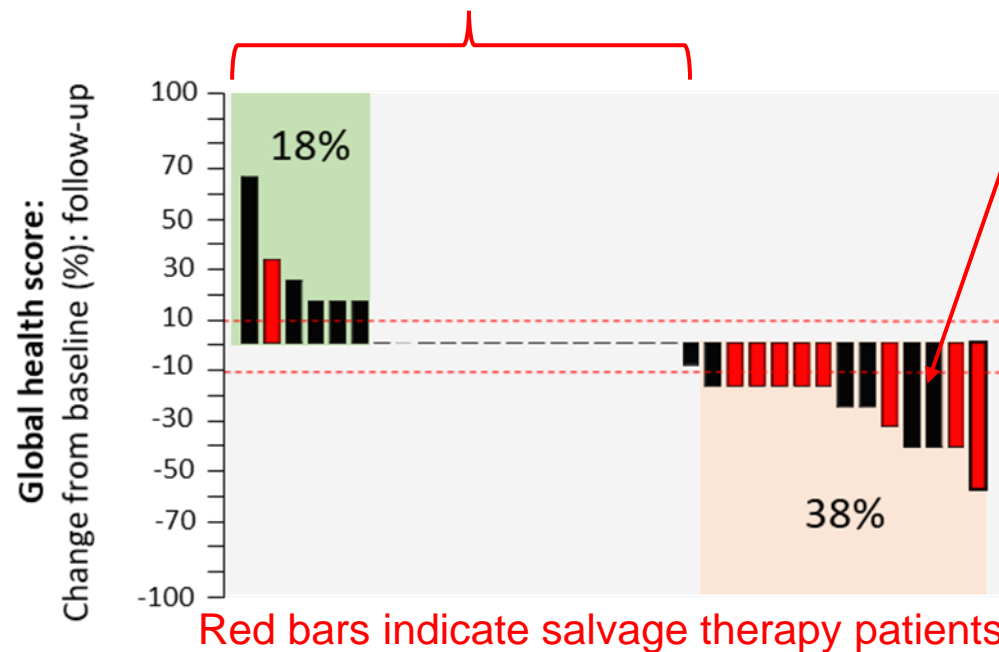


Global health quality of life score decreased in 38% of patients.

## Quality of Life mostly deteriorating in Salvage therapy patients

### Global health score

62% improving or remaining stable



Global health quality of life score decreased in 38% of patients.

A large proportion of patients with deterioration were salvage therapy patients (red bars).

## Summary & Discussion



### Treatment intention

Mainly used as **salvage or intensification therapy**

Suitable treatment options beyond guideline recommendations

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### Safety

4% of grade 3 + 4 adverse events peri-interventionally

10% of grade 3 + 4 adverse events within 30 days after treatment

Most common: grade 1-2 Post-embolization Syndrome (Pain)

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### Procedural medications

Vast differences in procedural medications reported

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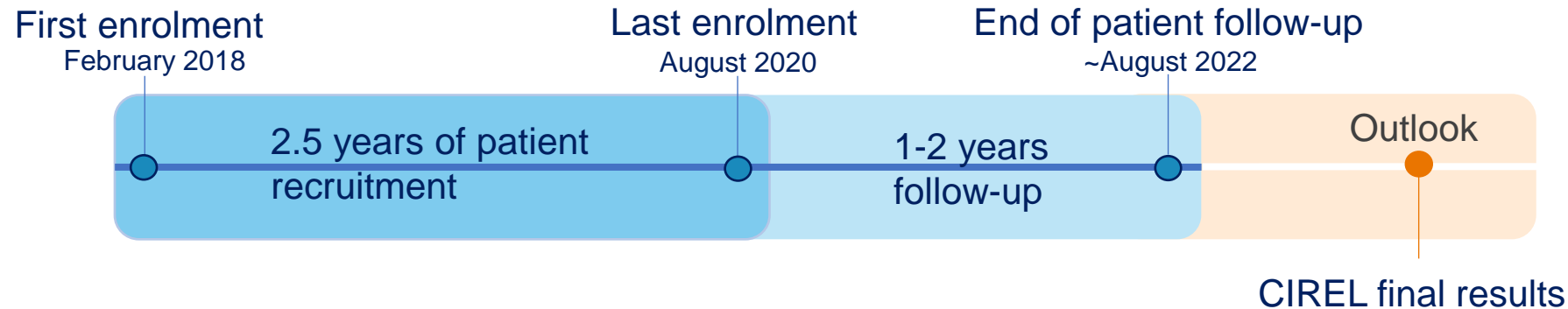
### HRQOL

62% reported a stable or better global health score

54% of patients that reported worse HRQOL were treated as salvage-therapy patients

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## Outlook



The final results of CIREL will provide prospective data on:

- Overall survival and (hepatic) progression-free survival
- Objective response rate (Independent central image review by FFCD)
- Early tumour shrinkage at  $\geq 20\%$  and  $\geq 30\%$  at first tumour assessment
- Depth of response
- Quality of Life using a comprehensive questionnaire

## Acknowledgements

- Terumo Europe NV



- CIREL Steering Committee

- Carole Déan



- All participating centres and personnel involved in CIREL

Thank you!

more information in

**CVIR**

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## Treatment intentions of LP-IRI

