## **Supplementary Material**

## **Supplementary Tables**

Table S1. Centre Characteristics

| Centre characteristics                                                 |                                                                                                 | N (%)     |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------|
| Is your center administering CAR T-cell therapies?                     | Yes                                                                                             | 72 (89)   |
|                                                                        | No                                                                                              | 9 (11)    |
| Is your center involved in delivering commercial CAR T-cell therapies? | Yes                                                                                             | 61 (94)   |
|                                                                        | No                                                                                              | 4 (6)     |
| Which statement best describes your main practice of CAR-T program     | In a transplantation unit                                                                       | 19 (29)   |
|                                                                        | In a dedicated CAR T-cell unit                                                                  | 7 (11)    |
|                                                                        | In a mixed Transplant/CAR T unit                                                                | 29 (45)   |
|                                                                        | In a hematology/oncology department                                                             | 9 (14)    |
|                                                                        | Other                                                                                           | 1 (1,5)   |
| Which statement best describes your cellular therapy program?          | Fully FACT-JACIE-accredited for alloHCT (accredited/in process of reaccreditation)              | 47 (72)   |
|                                                                        | Fully FACT-JACIE-accredited for autoHCT (accredited/in process of reaccreditation)              | 36 (55)   |
|                                                                        | Fully FACT-JACIE-accredited for IEC (including CART) (accredited/in process of reaccreditation) | 26 (40)   |
|                                                                        | Working towards FACT-JACIE accreditation alloHCT (first accreditation)                          | 6 (9)     |
|                                                                        | Working towards FACT-JACIE accreditation autoHCT (first accreditation)                          | 6 (9)     |
|                                                                        | Working towards FACT-JACIE re-accreditation IEC (including CART) (first accreditation)          | 14 (21.5) |
|                                                                        | Not accredited                                                                                  | 6 (9)     |

Table S2. Grading system

| Grading of cytopenias after CAR-T                               | N (%)   |
|-----------------------------------------------------------------|---------|
| Common Terminology Criteria for Adverse Events (CTCAE, v.5.0)   | 42 (84) |
| Phenotypes of Neutrophil Recovery                               | 3 (6)   |
| Achieving Hematologic Count "Recovery" or "Normalization"       | 2 (4)   |
| Hematopoietic Recovery according to CIBMTR reporting guidelines | 5 (10)  |
| Local/national grading                                          | 2 (4)   |
| Other                                                           | 2 (4)   |

 Table S3. Risk stratification.

| Do you use a risk-stratification system to determine patient-individual risk of hematological toxicity prior to CAR-T infusion? N (%) |         |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------|---------|--|--|
| No                                                                                                                                    | 32 (64) |  |  |
| Yes                                                                                                                                   | 18 (36) |  |  |
| If yes, which classification system?                                                                                                  |         |  |  |
| CAR-HEMATOTOX                                                                                                                         | 18 (90) |  |  |
| Other                                                                                                                                 | 3 (15)  |  |  |

Table S4. Selection criteria and Work-up

| Which criteria are you using to identify HLH/MAS in patients with severe hematotoxicity after CAR-T cell therapy? N (%)                                  |           |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--|--|
| EBMT/EHA criteria                                                                                                                                        | 30 (61)   |  |  |
| MD Anderson criteria                                                                                                                                     | 13 (26,5) |  |  |
| HScore                                                                                                                                                   | 11 (22)   |  |  |
| None                                                                                                                                                     | 2 (4)     |  |  |
| Other                                                                                                                                                    | 5 (10)    |  |  |
| Do you perform an extensive work-up for CHIP or MDS (incl. next-generation sequencing on a targeted gene panel) in patients with persistent ICAHT? N (%) |           |  |  |
| Yes, we initiate these studies in case of persistent ICAHT after approx.  1 month after CAR-T infusion                                                   | 4 (8)     |  |  |
| EBMT/EHA Consensus Guidelines on Immune Effector Cell Associated Hematotoxicity (ICAHT)                                                                  | 16 (33)   |  |  |
| Yes, we initiate these studies in case of persistent ICAHT after approx. 6 months after CAR-T infusion                                                   | 2 (4)     |  |  |
| Yes, we initiate these studies in case of persistent ICAHT after approx. 12 months after CAR-T infusion                                                  | 1 (2)     |  |  |
| We do not regularly perform such a work-up for patients with prolonged ICAHT                                                                             | 20 (41)   |  |  |
| Other                                                                                                                                                    | 6 (12)    |  |  |

Figure S1

Which statement best describes the main practice of your CAR-T program (i.e. unit in which patients receiving CAR T-cells are generally hospitalized)?

