**Supplementary table 2** Characteristics of patients with allergic reaction to L-Asparaginase.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient | Administration route | Commercial name | Sex | Age at diagnosis (years) | Type of leukemia | Risk classification | Treatment protocol | Treatment phase | Concomitant use of corticosteroids | Use of pre-medication | Grade of allergic reaction\*1 | Number of doses before allergic reaction \*2 | Time until allergic reaction (months)\*3 |
| 1 | IV | Elspar | Male | 3 | B-ALL | High | BFM 95 | Reinduction | Yes | Yes | \*4 | 9 | 7 |
| 2 | IV | Elspar | Male | 10 | B-ALL | High | BFM 95 | Reinduction | Yes | Yes | 3 | 12 | 6 |
| 3 | IM | Elspar | Male | 4 | B-ALL | Low | BFM 95 | Reinduction | Yes | Yes | 2 | 11 | 7 |
| 4 | IV | Elspar | Male | 5 | B-ALL | Low | BFM 95 | Intensification | No | Yes | 3 | 9 | 1 |
| 5 | IV | Aginasa | Male | 4 | B-ALL | High | BFM 2002 | Reinduction | Yes | Yes | 3 | 16 | 10 |
| 6 | IV | Aginasa | Male | 9 | B-ALL | Low | BFM 2002 | Reinduction | Yes | Yes | 2 | 9 | 5 |
| 7 | IV | Aginasa | Male | 6 | T-ALL | High | BFM 2009 | HR-2\*7 | No | Yes | 3 | 10 | 4 |
| 8 | IM | Aginasa | Male | 2 | B-ALL | Low | BFM 2009 | Reinduction | Yes | Yes | 2 | 9 | 5 |
| 9a\*5 | IV | Aginasa | Male | 7 | T-ALL | Low | BFM 2009 | Induction | Yes | Yes | 3 | 2 | 0.1 |
| 9b\*6 | IV | Leuginase |  |  |  |  |  | Induction | Yes | Yes | 3 | 3 | 0.1 |
| 10 | IV | Leuginase | Female | 11 | B-ALL | High | BFM 2009 | HR-1\*8 | No | Yes | 3 | 9 | 3 |
| 11 | IV | Leuginase | Male | 14 | B-ALL | High | BFM 2009 | Induction | Yes | Yes | 3 | 7 | 0.5 |
| 12 | IV | Leuginase | Male | 5 | B-ALL | Low | BFM 2009 | HR-1 | No | Yes | 3 | 12 | 5 |
| 13 | IV | Leuginase | Male | 5 | B-ALL | Low | BFM 2009 | HR-3\*9 | Yes | Yes | 3 | 11 | 4 |
| 14 | IV | Leuginase | Male | 5 | B-ALL | Low | BFM 2009 | HR-3 | No | Yes | 3 | 11 | 4 |
| 15 | IV | Leuginase | Male | 2 | B-ALL | Low | BFM 2009 | Reinduction | Yes | Yes | 3 | 9 | 5 |
| 16 | IV | Leuginase | Male | 4 | B-ALL | Low | BFM 2009 | Reinduction | Yes | No | 3 | 12 | 5 |
| \*1 Grade of allergic reaction = grade of allergic reaction according to CTCAE version 5.0; \*2 Number of doses before the allergic reaction = total number of doses received previously including the dose when the allergic reaction was observed; \*3 Time until allergic reaction = time since the first administration of L-asparaginase until the allergic reaction; \*4 Due to lack of information in the medical record, the reaction could not be classified; \*5 First reaction of patient 9 identified by letter “a”; \*6 Second reaction of patient 9 identified by letter “b”; \*7 HR-2 = high-risk block 2; \*8 HR-1 = high-risk block 1; **\***9 HR-3 = high-risk block 3. |
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