Diagnosis of acute promyelocytic leukemia

- All trans retinoic acid (ATRA)
- Arsenic trioxide (ATO)
- Prednisolone
- Hydroxyurea
- Pip/Taz

Treatment

- Dexamethasone
- Dexamethasone
- Dexamethasone
- Hydroxyurea
- Pip/Taz

Days after admission

Admission
Day 0
Day 15
Day 30

Leucocytes (cells/μl)

Hemoglobin (g/dl)

Monocytes (cells/μl)

Lymphocytes (cells/μl)

Days after admission

LDH (U/l)

Oxygen saturation (%)
Radiological assessment (Days after admission)

Day 2
Day 11
Day 15
Day 17
Day 18
Day 22
Day 30

Supplementary figure 2
SARS-CoV-2 positive RT-PCR
Admission Day 0  Day 15  Day 30

Days after admission to ICU

Diagnosis of acute promyelocytic leukemia

Treatment

- ATRA
- ATO
- Hydroxycarbamide
- Cytarabine
- Dexamethasone
- Vancomycin
- Meropenem
- Ambisome
- Dialysis (CVVHD)/cytosorb
- Intubation and ventilation (BIPAP)/NIV-CPAP/High flow
- Extubation

**B**

- Leucocytes (cells/nl)
- Thrombocytes (cells/nl)
- Hemoglobin (g/dl)

**C**

- Lymphocytes (cells/nl)
- Granulocytes (cells/nl)
- Monocytes (cells/nl)
- CD19+ cells (cells/nl)
- CD4/CD8 Ratio
- CD8+ CD4 of CD3+ T cells
- CD4+ CD8 of CD3+ T cells

Days after admission to ICU
Supplementary Table S1

### A. Microbiological cultures

| Days after admission | Tested material | Results                                | Comments                                      |
|----------------------|-----------------|----------------------------------------|----------------------------------------------|
| Day 2                | Blood culture   | no bacterial growth                    |                                              |
| Day 2                | Blood culture   | no bacterial growth                    |                                              |
| Day 2                | Urine culture   | no bacterial growth                    |                                              |
| Day 6                | Stool           | Clostridium difficile Glutamate Dehydrogenase - negative |                                |
| Day 9                | Stool           | Clostridium difficile Glutamate Dehydrogenase - negative |                                |
| Day 11               | Blood culture   | no bacterial growth                    |                                              |
| Day 11               | Urine culture   | no bacterial growth                    |                                              |
| Day 15               | Blood culture   | no bacterial growth                    |                                              |
| Day 15               | Blood culture   | no bacterial growth                    |                                              |
| Day 15               | Blood culture   | no bacterial growth                    |                                              |
| Day 15               | Blood culture   | no bacterial growth                    |                                              |
| Day 15               | Blood culture   | no fungal growth                       |                                              |
| Day 15               | Urine culture   | no bacterial growth                    |                                              |
| Day 18               | Blood culture   | no bacterial growth                    |                                              |
| Day 18               | Blood culture   | no bacterial growth                    |                                              |
| Day 18               | Blood culture   | no bacterial growth                    |                                              |
| Day 24               | Blood culture   | no bacterial growth                    |                                              |
| Day 24               | Urine culture   | no bacterial growth                    |                                              |
| Day 24               | Blood culture   | no fungal growth                       |                                              |

### B. Specific microbiological assays

| Days after admission | Tested material | Tested pathogen                        | Results                  | Comments                                      |
|----------------------|-----------------|----------------------------------------|--------------------------|----------------------------------------------|
| Day 0                | Serum           | Treponema pallidum-specific antibodies | negative                 |                                              |
| Day 15               | BAL             | Pneumocystis jirovecii antigen         | negative negative        | BAL: Bronchoalveolar lavage                  |
| Day 17               | Urine           | Leg. pneumophila. Serotype 1-Antigen   | negative                 |                                              |
| Day 17               | BAL             | Aspergillus Antigen                    | negative                 | BAL: Bronchoalveolar lavage                  |
| Day 17               | BAL             | Chlamydia pneumoniae-DNA-PCR           | negative                 | BAL: Bronchoalveolar lavage                  |
| Day 17               | BAL             | Legionella pneumophila-DNA-PCR         | negative                 | BAL: Bronchoalveolar lavage                  |
| Day 17               | BAL             | Mycoplasma pneumoniae-DNA-PCR          | negative                 | BAL: Bronchoalveolar lavage                  |
## A. SARS-CoV 2 molecular diagnostics

| Days after admission | Tested material | Results | Comments |
|----------------------|-----------------|---------|----------|
| Day 0                | nasopharyngeal swabs | SARS-CoV-2-RNA (PCR) | Not detected |
| Day 6                | nasopharyngeal swabs | SARS-CoV-2-RNA (PCR) | Not detected |
| Day 10               | nasopharyngeal swabs | SARS-CoV-2-RNA (PCR) | Not detected |
| Day 14               | nasopharyngeal swabs | SARS-CoV-2-RNA (PCR) | Positive | Ct Threshold: <30 cycles |
| Day 14               | nasopharyngeal swabs | SARS-CoV-2 Sequencing | B.1.1.7 (17/17 B.1.1.7 SNPs) | Mutations in S-Gene: - IHV68I: ND - K417T: ND - K417N: ND - N439K: ND - L452R: ND - Y453F: ND - E484K: ND - E484Q: ND - N501Y: D - D614G: D - Q677H: ND - P681H: D - P681R: ND - V1176F: Not enough coverage (ND: not detected; D: Detected) |
| Day 27               | nasopharyngeal swabs | SARS-CoV-2-RNA (PCR) | Positive | Ct Threshold: <30 cycles |
| Day 29               | nasopharyngeal swabs | SARS-CoV-2-RNA (PCR) | Positive | Ct Threshold: >30 cycles |
| Day 34               | nasopharyngeal swabs | SARS-CoV-2-RNA (PCR) | Positive | Ct Threshold: >30 cycles |

## B. Viral serology

| Days after admission | Tested material | Results | Comments |
|----------------------|-----------------|---------|----------|
| Day 1                | Serum | HIV-DUO SE | negative |
| Day 2                | Serum | EBV-VCA-IgG (EIA) | >750 U/ml |
| Day 2                | Serum | EBV-VCA-IgM (EIA) | negative |
| Day 2                | Serum | EBV-EBNA1-IgG (EIA) | 229 U/ml |
| Day 2                | Serum | CMV-IgG (EIA) | 100.1 AE/ml |
| Day 22               | Serum | HIV-DUO SE | negative |
| Day 23               | Serum | Hbc-Antibodies | negative |
| Day 23               | Serum | HBs-Antibodies | 205 U/l |
| Days after admission | Tested material | Results       | Comments                |
|---------------------|----------------|---------------|-------------------------|
| Day 2               | Blood          | *Epstein-Barr Virus (EBV)* DNA - PCR | Not detected            |
| Day 2               | Plasma         | *Cytomegalovirus (CMV)-DNA- PCR* | Not detected            |
| Day 17              | BAL            | SARS-Coronavirus 2-RNA (Multiplex-PCR) | Positive                |
| Day 17              | BAL            | *Respiratory syncytial virus A*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Respiratory syncytial virus B*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Influenza A*-Virus-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Influenza B*-Virus-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Parainfluenza 1*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Parainfluenza 2*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Parainfluenza 3*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Parainfluenza 4*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Metapneumovirus*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Coronavirus 229E*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Coronavirus NL63*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Coronavirus HKU1*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Coronavirus OC43*-RNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Bocavirus*-DNA (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Influenza A H1N1/2009* (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Influenza A H1* (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Influenza A H3* (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Entero/Rhinovirus* (Multiplex-PCR) | Not detected            |
| Day 17              | BAL            | *Adenovirus*-DNA (Multiplex-PCR) | Not detected            |