

**Supplementary Table S2: Overview of *Aspergillus* tests performed and outcomes for proven/probable CAPA patients without antifungal treatment**

BAL <i>Aspergillus</i> culture	BAL GM index $\geq 1.0$	BAL <i>Aspergillus</i> PCR	NBL <i>Aspergillus</i> culture	NBL GM index $\geq 4.5$	NBL <i>Aspergillus</i> PCR	BA <i>Aspergillus</i> culture	sputum <i>Aspergillus</i> culture	serum GM index $> 0.5$	serum BDG $\geq 80$ pg/mL	serum <i>Aspergillus</i> PCR	Time between ICU admission and CAPA diagnosis	Time between ICU admission and ICU discharge	Patient status
○	●										0 days	0 days	deceased
●	○	○						○		○	7 days	16 days	alive <sup>a</sup>
●	○	○						○	○	○	1 day	1 day	alive <sup>b</sup>
●	○	●									6 days	18 days	alive <sup>a</sup>
●	○	●						○	●	○	3 days	9 days	deceased
○	●	●						○	○	○	25 days	91 days	alive <sup>a</sup>
●	○	○									18 days	29 days	deceased
								●	●	○	7 days	7 days	deceased
●	●										7 days	8 days	deceased
○	○					○	○	●	○	○	4 days	16 days	alive <sup>c</sup>
●	○					●	○	○			9 days	15 days	alive <sup>d</sup>

Legend: ● positive test outcome; ○ negative test outcome

<sup>a</sup>unclear why patient was not treated with antifungal therapy; <sup>b</sup>in patients with chronic obstructive pulmonary disease or chronic respiratory disease, the PCR or culture results should be confirmed by GM testing to rule out colonization or chronic aspergillosis, in addition to clinical improvement, invasive aspergillosis was deemed unlikely; <sup>c</sup>positive serum GM was deemed false positive by clinicians, as all consecutive *Aspergillus* tests performed, including serum GM, were negative; <sup>d</sup>antifungal therapy was not deemed necessary by clinicians, as patient improved clinically and was negative for BAL GM, patient was considered *Aspergillus* colonized by clinicians.