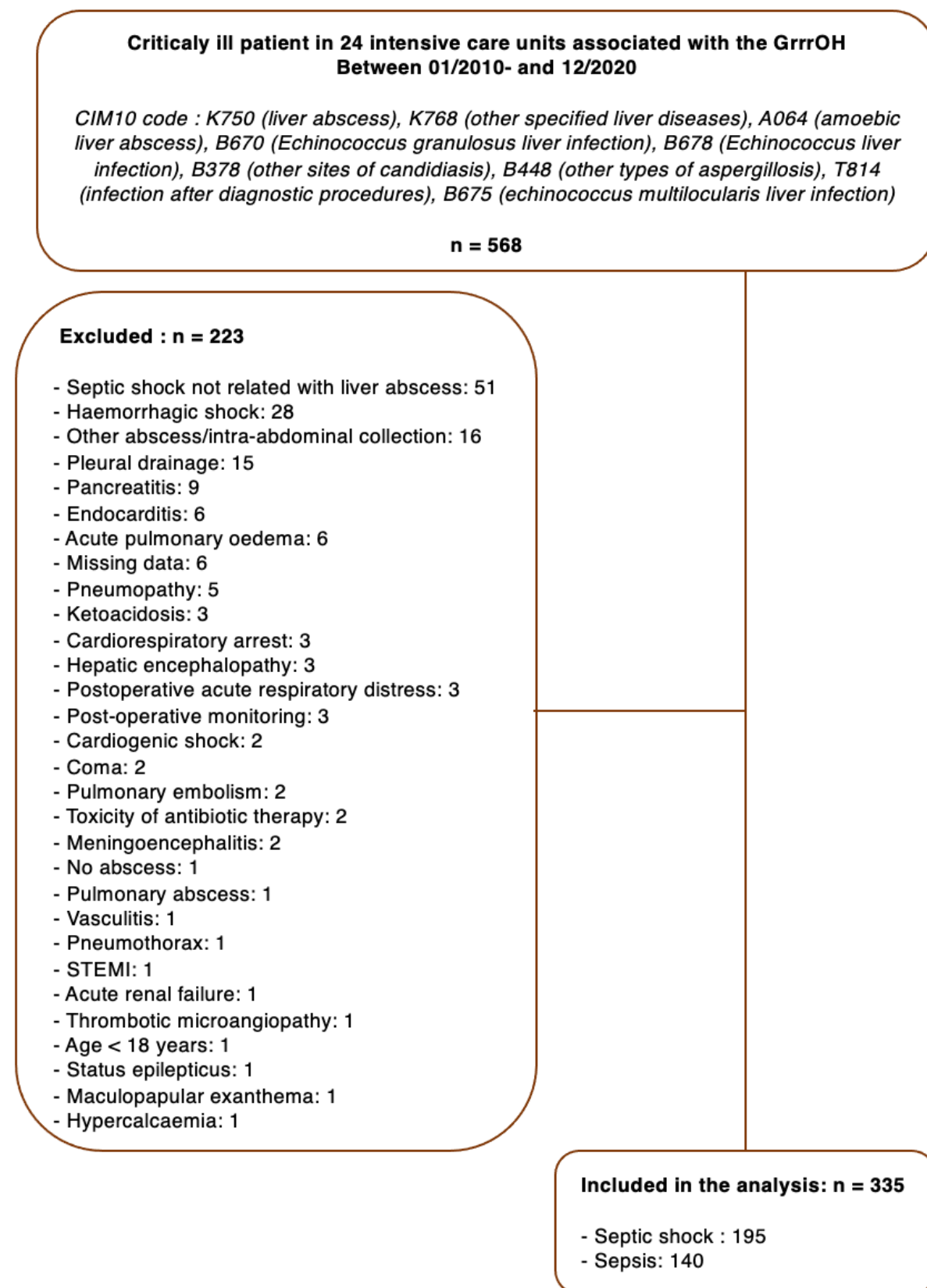
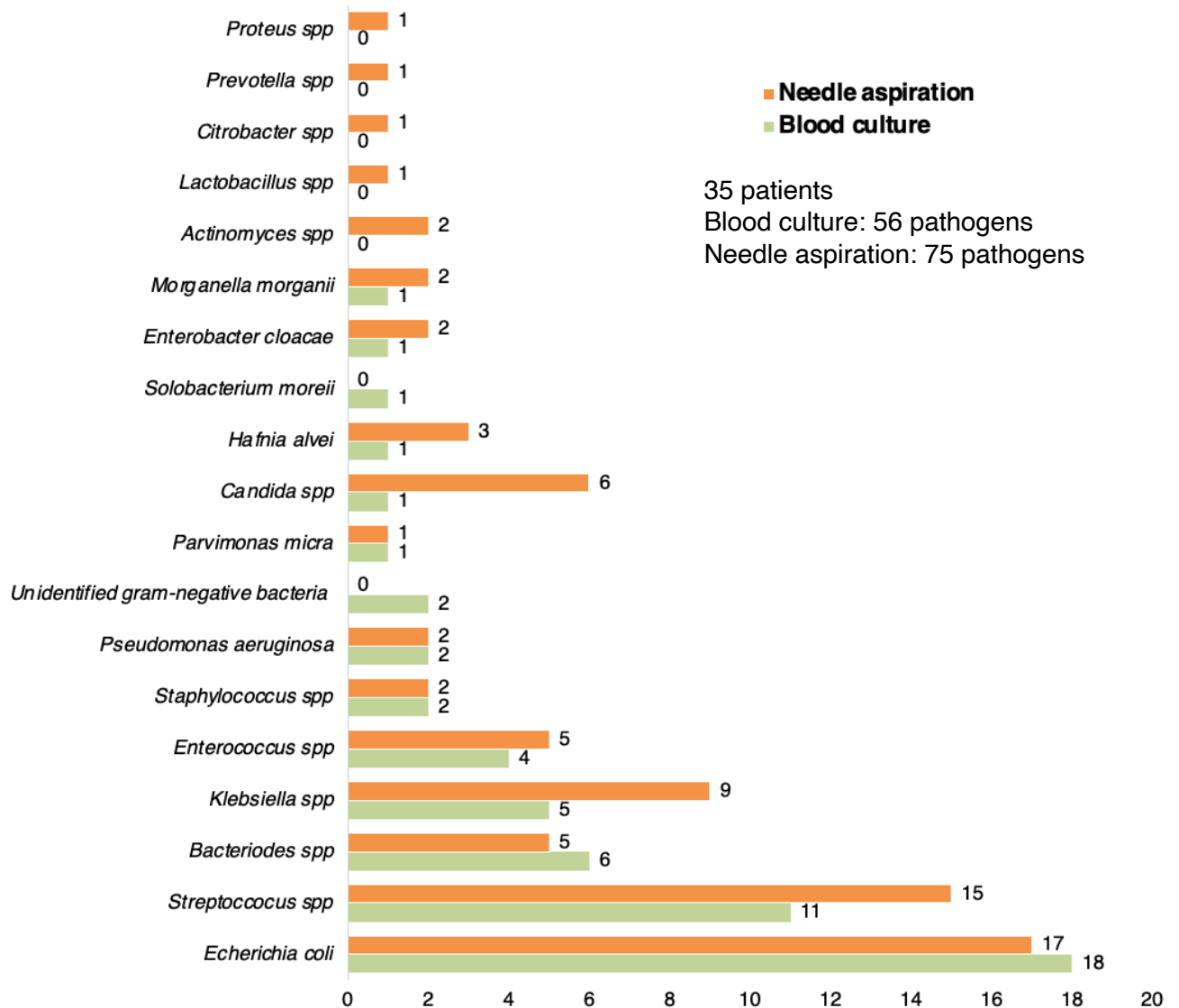


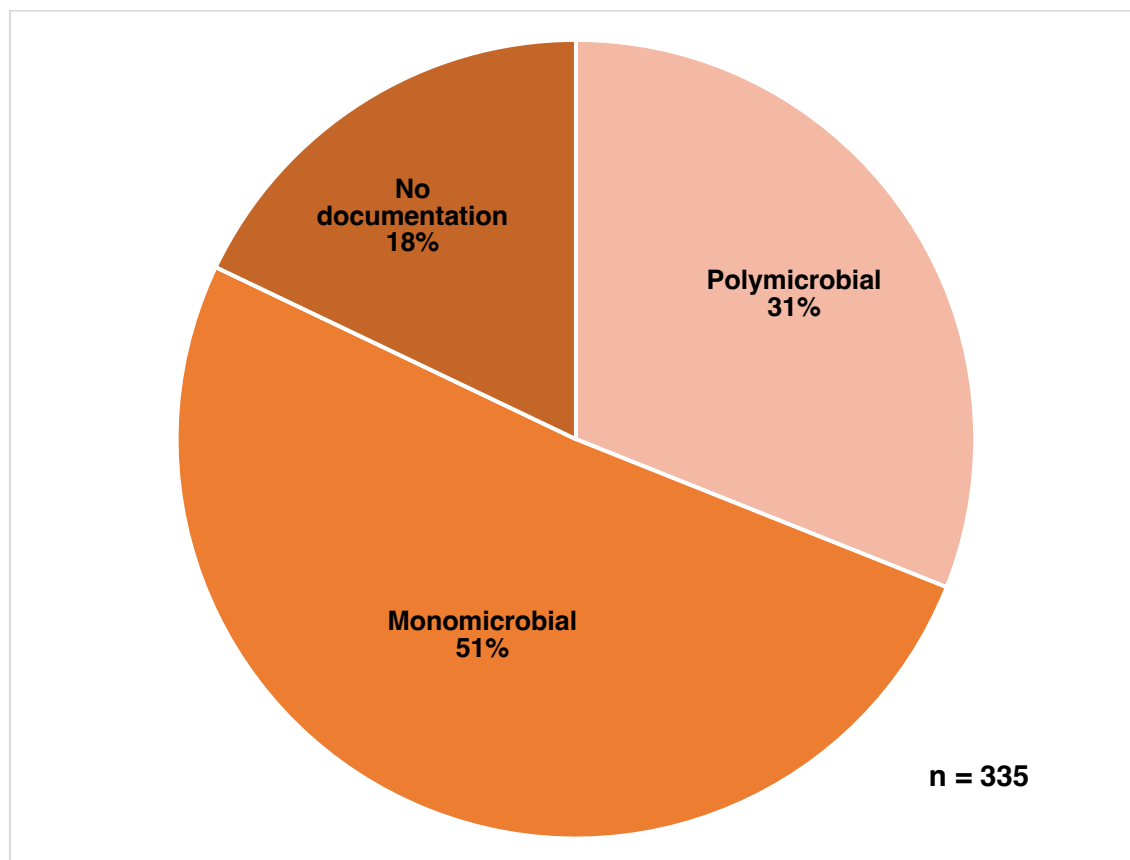
Supplementary figure 1: Flow Chart



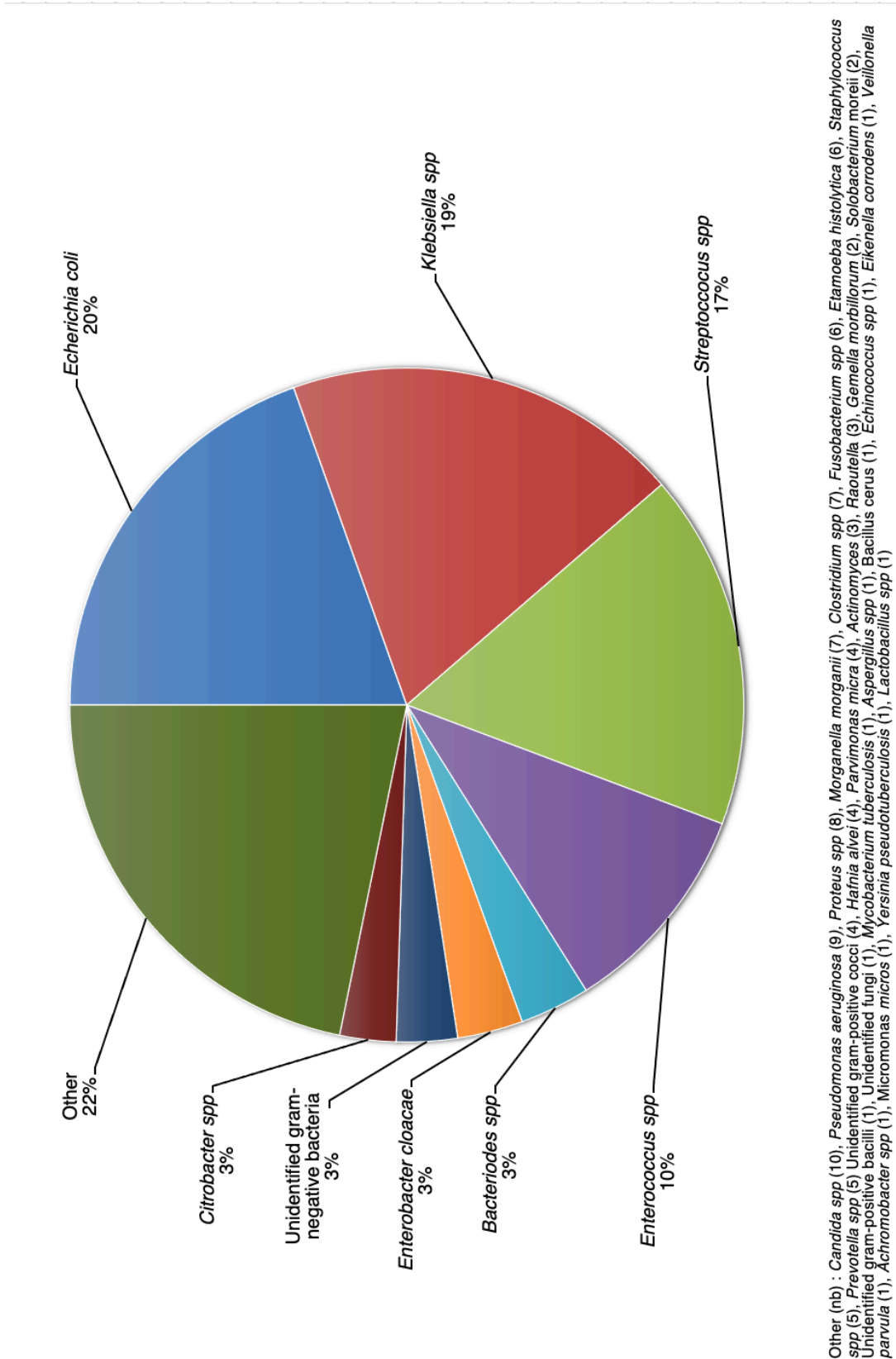
Supplementary figure 2: Detailed microbiological data for the different types of documentations in blood culture and needle aspiration



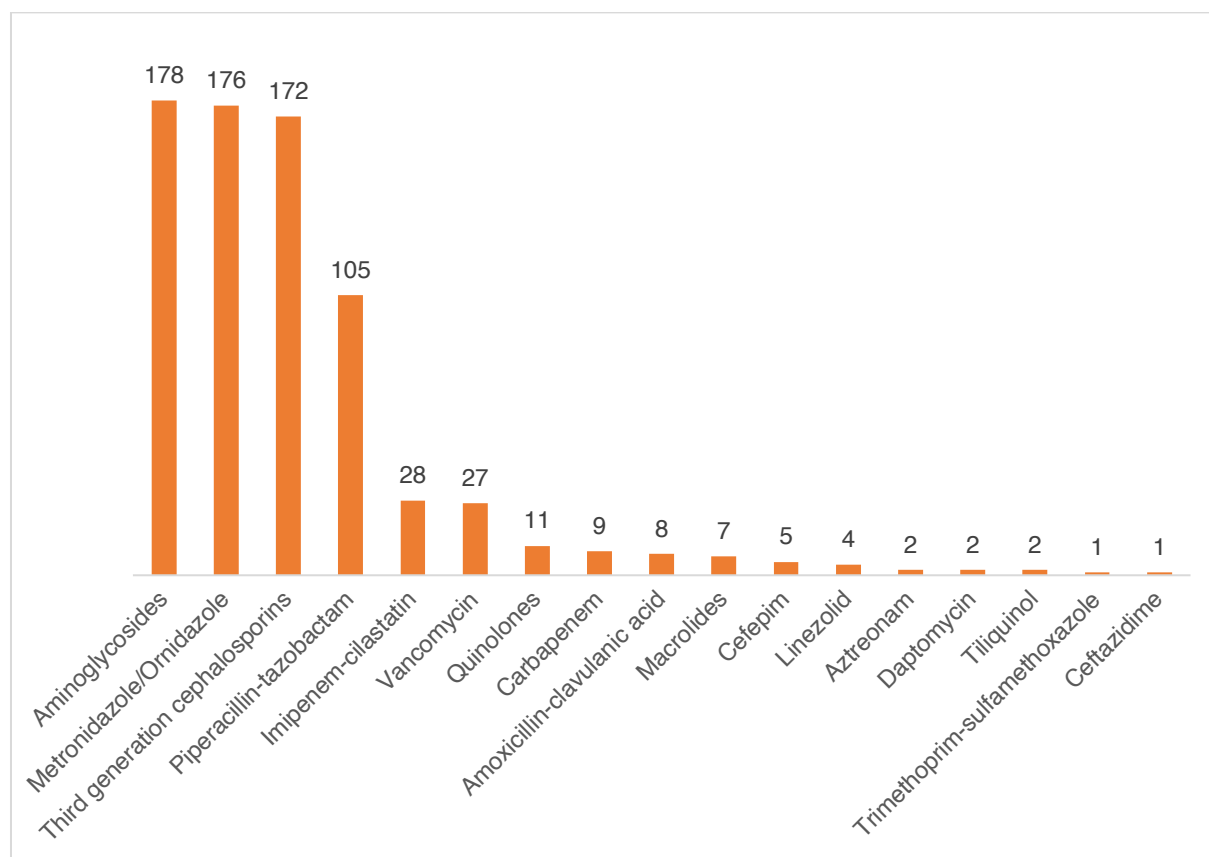
Supplementary figure 3 : Microbiological Documentation



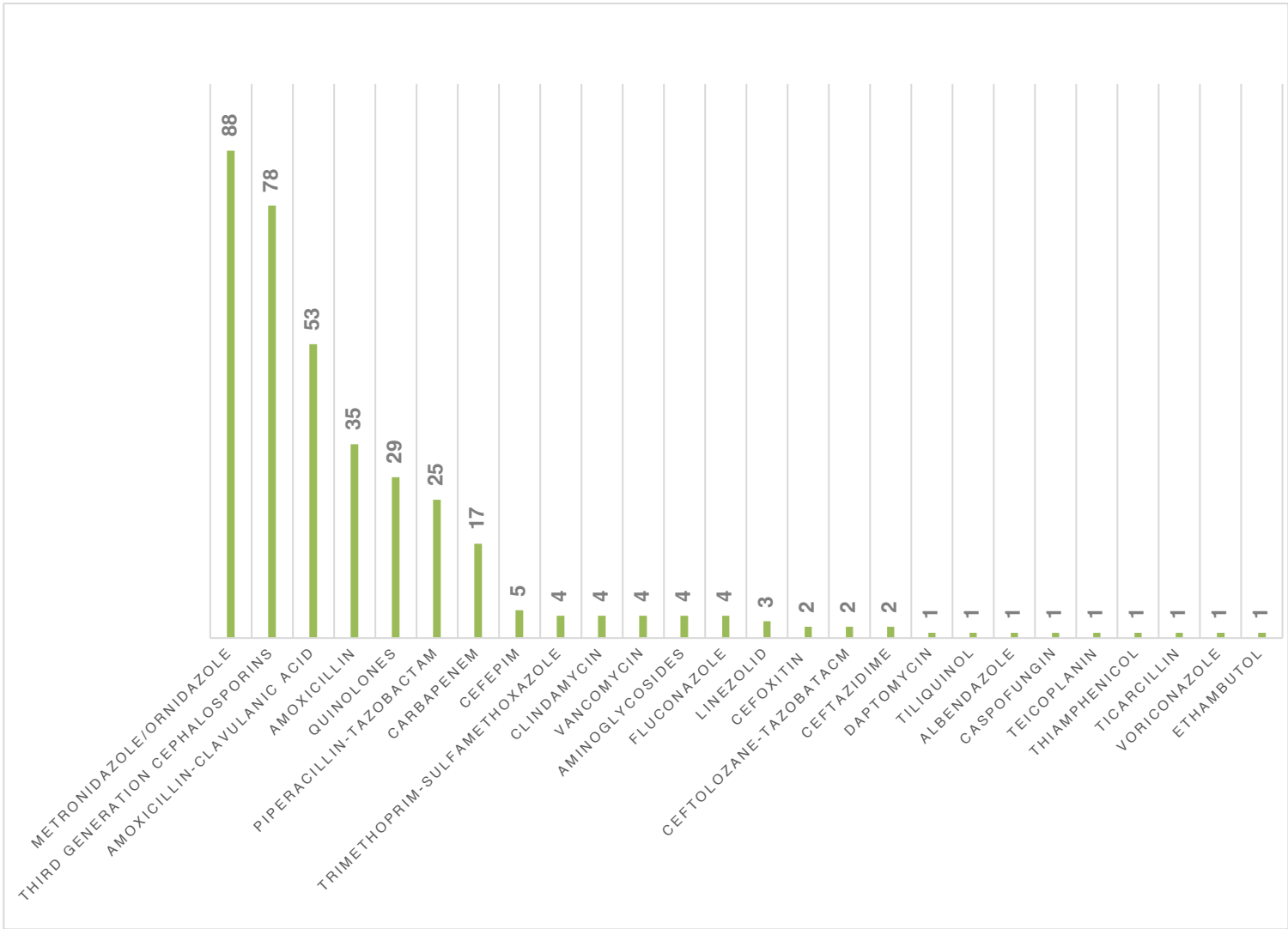
Supplementary figure 4: Extensive microbiological Documentation



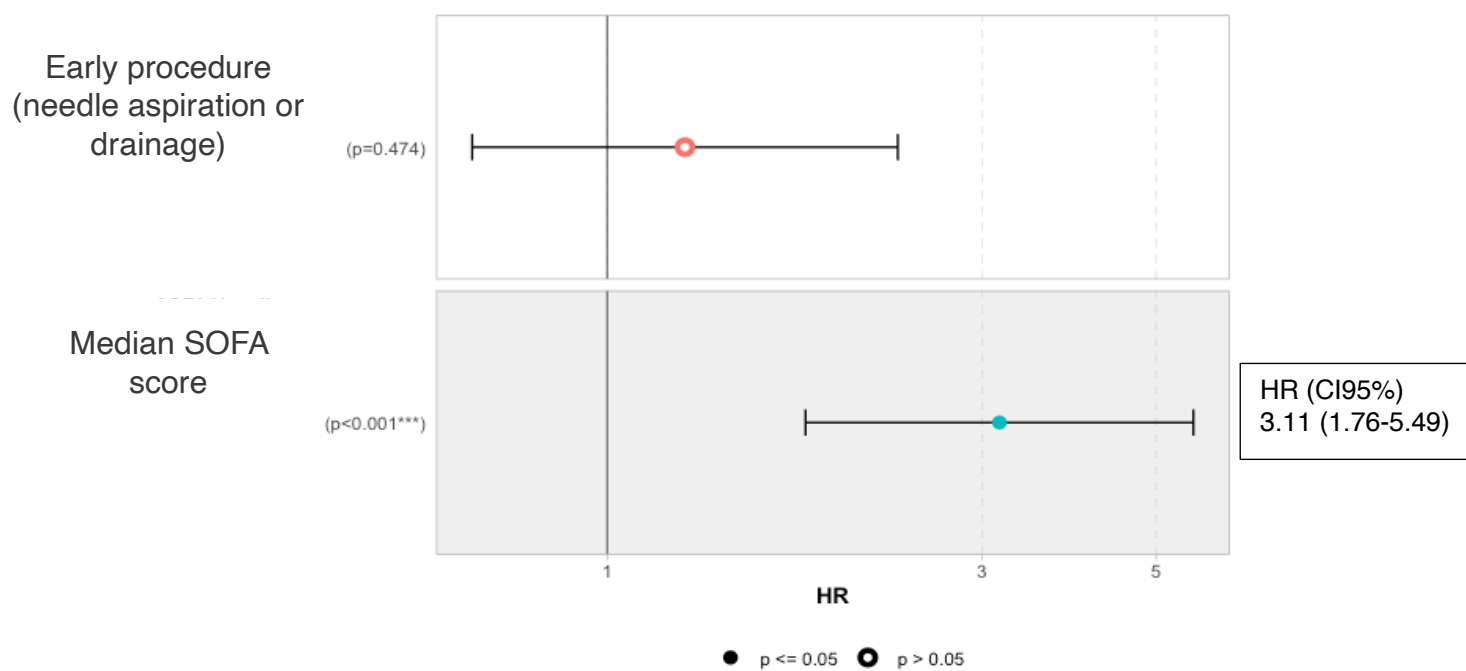
Supplementary figure 5: Antibiotic treatment on admission to the ICU (Day 1)



Supplementary figure 6: Modification of empirical antibiotic therapy



Supplementary figure 7: Factor associated with mortality, matched population



Additional file 1: General characteristics of the 335 patients included, presence or absence of portal vein thrombosis (PVT)

Parameters	Total n = 335 n (%) or Med. [IQR]	PVT n = 290 n (%) or Med. [IQR]	No PVT n = 45 n (%) or Med. [IQR]	p value*
Age, years	66 [55-73]	66 [55-74]	65 [57-71]	0.764
Male gender	228 (68.1)	194 [66.9]	34 (75.6)	0.323
SAPS2	42.00 [31.75-53.25]	43.00 [33.00-53.00]	34.00 [29.00-54.50]	0.490
SOFA at ICU admission	6 [3-9]	6 [3-8]	6 [4-9]	0.174
BMI	24.28 [22.19-28.65]	24.39 [21.71-28.73]	24.16 [22.93-27.68]	0.985
<i>Comorbidities</i>				
CCI	1 [0-3]	1 [0-3]	1 [0-4]	0.109
Diabetes	100 (29.9)	81 (27.9)	19 (42.2)	0.076
Chronic liver disease	60 (17.9)	50 (17.2)	10 (22.2)	0.547
Cancer and hematologic malignancies	98 (29.3)	80 (27.6)	18 (40)	0.126
Cirrhosis CHILD PUGH B or C	12 (3.6)	9 (3.1)	3 (6.7)	0.444
Chronic kidney disease	21 (6.3)	19 (6.6)	2 (4.4)	0.832
Tobacco use	102 (30.4)	83 (28.6)	19 (42.2)	0.094
Alcohol consumption	100 (29.9)	78 (26.9)	22 (48.9)	0.004
Time from diagnosis to admission, days	0 [-1 - 0]	0 [-1 - 0]	0 [0-3]	0.944
Single abscess	204 (60.9)	182 (62.8)	22 (48.9)	0.107
Multiple abscess	126 (37.6)	104 (35.9)	22 (48.9)	0.130
<i>Localisation</i>				
Left lobe involvement only	61 (18.2)	55 (19)	6 (13.3)	1.000
Right lobe involvement only	130 (38.8)	114 (39.3)	16 (35.6)	0.094
Bi-lobar involvement	31 (9.3)	25 (8.6)	6 (13.3)	0.460
Abscess greater size, mm	67 [47-91]	67 [45.5-90]	65.5 [60-100]	0.359
<i>Cause of abscess</i>				
Arterial	19 (5.7)	17 (5.9)	2 (4.4)	0.971
Portal	36 (10.7)	28 (9.7)	8 (17.8)	0.168
Local	40 (11.9)	31 (10.7)	9 (20.0)	0.122
Biliary	106 (31.6)	95 (32.8)	11 (24.4)	0.345
Cryptogenic	134 (37.3)	119 (41.0)	15 (33.3)	0.413
Associated portal thrombosis	45 (13.4)			

<i>Procedures</i>				
Drainage/percutaneous needle aspiration	208 (62.1)	187 (64.5)	21 (46.7)	0.033
Surgical drainage	12 (3.6)	11 (3.8)	1 (2.2)	0.923
Time from drainage to admission, days	1 [0-2]	1 [0-2]	0 [0-2]	0.974
Time from drainage to diagnosis, days	2 [1-5]	1 [1-4]	4 [1-11]	0.031
Antibiotics	335 (100)	290 (100)	45 (100)	
Duration of antibiotic treatment, days	35 [21-42]	28 [21-42]	42 [27-42]	0.434
Antifungal	27 (8.1)	23 (7.9)	4 (8.9)	1.000
<i>Organ support therapy during ICU stay</i>				
Vasopressor infusion	209 (62.4)	179 (61.7)	30 (66.7)	0.637
Vasopressor infusion duration, days	1 [0-3]	1 [0-3]	1.50 [0-3.25]	0.205
Invasive mechanical ventilation	99 (29.6)	84 (29)	15 (33.3)	0.637
Invasive mechanical ventilation duration, days	0 [0-1]	0 [0.1]	[0-1.25]	0.657
Oxygen therapy	214 (63.9)	185 (63.8)	29 (64.4)	1.000
Renal replacement therapy	44 (13.1)	33 (11.4)	11 (24.4)	0.029
Red blood cell transfusion	61 (18.2)	54 (18.6)	7 (15.6)	0.773
Death in ICU	39 (11.6)	25 (8.6)	14 (31.1)	<0.001
Death in hospital	24 (7.2)	20 (6.9)	4 (8.9)	0.863
Length of stay in ICU: days	5 [3-9]	5 [3-9]	5 [3-14]	0.367
Length of stay in hospital: days	22 [15-39]	20 [14.5-40]	20.5 [16.5-23.75]	0.285

SAPS2 simplified acute physiology score; CCI, charlson comorbidity index; SOFA, Sepsis-related organ failure, *p for univariate analysis

Additional file 2: Analysis of clinical and biological data at ICU admission and presence or absence of portal vein thrombosis (PVT) in 335 patients with liver abscess

Parameters	Total n = 335 n (%) or Med. [IQR]	PVT n = 290 n (%) or Med. [IQR]	No PVT n = 45 n (%) or Med. [IQR]	p value*
<i>Clinical signs</i>				
Fever, temperature > 38°C	244 (78.8)	211 (72.8)	33 (73.3)	1.000
Chills	85 (25.4)	73 (25.2)	12 (26.7)	0.976
Abdominal pain	161 (48.1)	135 (46.6)	26 (57.8)	0.214
Jaundice	54 (16.1)	48 (16.6)	6 (13.3)	0.743
<i>Biological parameters</i>				
Leucocytes (Giga/L)	16.00 [10.42-23.95]	16.00 [10.70-24.00]	16.80 [8.50-22.00]	0.814
Hemoglobin (g/dL)	10.5 [9.1-12.1]	10.70 [9.15-12.20]	10.00 [8.73-10.85]	0.032
Platelets (Giga/L)	158 [82-267]	161 [89-277]	142 [61-233]	0.113
Blood alanine aminotransferase (UI/L)	85.00 [41.00-175.00]	86.00 [42.00-175.50]	75.50 [34.25-138.50]	0.603
Blood aspartate aminotransferase (UI/L)	99.50 [53.00-218.00]	99.50 [51.25-215.75]	102.50 [61.00-235.50]	0.594
Blood gamma-glutamyl transferase (UI/L)	158.00 [90.00-259.00]	157.50 [87.25-251.25]	200.50 [126.25-362.50]	0.098
Blood alkaline phosphatase (UI/L)	200.00 [132.00-327.00]	197.00 [131.00-320.00]	258 [145.25-458.00]	0.095
Total blood bilirubin (μmol/L)	23.50 [13.00-51.00]	23.00 [13.00-51.00]	24.00 [17.50-48.50]	0.474
Serum creatinine (μmol/L)	114.00 [80.50-180.25]	119.50 [79.50-187.00]	102.00 [82.75-137.50]	0.223
FactorV (%)	87 [67-112]	90 [67-112]	82 [69-118]	0.783
Prothrombin time (%)	58.00 [18.00-68.00]	59.00 [48.50-68.00]	54.50 [44.00-70.75]	0.394
APTT	1.21 [1.03-1.40]	1.20 [1.00-1.39]	1.33 [1.21-1.70]	0.031
Fibrinogen (g/L)	6.33 [4.89-7.42]	6.44 [4.99-7.49]	5.45 [3.77-6.82]	0.193
Arterial lactate (mmol/L)	3.60 [1.90-5.50]	3.60 [1.98-5.50]	3 [1.73-5.75]	0.967

APTT, activated partial thromboplastin time, *p for univariate analysis

Additional file 3 : STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract (b) Provide in the abstract an informative and balanced summary of what was done and what was found
Introduction		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported
Objectives	3	State specific objectives, including any prespecified hypotheses
Methods		
Study design	4	Present key elements of study design early in the paper
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection
Participants	6	(a) <i>Cohort study</i> —Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up <i>Case-control study</i> —Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls <i>Cross-sectional study</i> —Give the eligibility criteria, and the sources and methods of selection of participants (b) <i>Cohort study</i> —For matched studies, give matching criteria and number of exposed and unexposed <i>Case-control study</i> —For matched studies, give matching criteria and the number of controls per case
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group
Bias	9	Describe any efforts to address potential sources of bias
Study size	10	Explain how the study size was arrived at
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) <i>Cohort study</i> —If applicable, explain how loss to follow-up was addressed <i>Case-control study</i> —If applicable, explain how matching of cases and controls was addressed <i>Cross-sectional study</i> —If applicable, describe analytical methods taking account of sampling strategy (e) Describe any sensitivity analyses

Continued on next page

Results		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed (b) Give reasons for non-participation at each stage (c) Consider use of a flow diagram
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders (b) Indicate number of participants with missing data for each variable of interest (c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount)
Outcome data	15*	<i>Cohort study</i> —Report numbers of outcome events or summary measures over time <i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure <i>Cross-sectional study</i> —Report numbers of outcome events or summary measures
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses
Discussion		
Key results	18	Summarise key results with reference to study objectives
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence
Generalisability	21	Discuss the generalisability (external validity) of the study results
Other information		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.