

A systematic review and meta-analysis of patient
data from the West Africa (2013-16) Ebola Virus
Disease epidemic. Supplementary Materials

Rojek *et al*

June 25, 2019

1 Appendix 1

| | PubMed ID | Author | n | Data from >1 ETU? | Type | Name of ETU | Medical care provider | Date of first patient inclusion | Date of last patient inclusion | Date published | Is the article reporting duplicate data or overlapping data? (If yes, ranking in brackets) |
|--------------|---------------------------|-------------------------------|------|-------------------|---------------------------------|--|-----------------------|---------------------------------|--------------------------------|----------------|---|
| Guinea | 26625118 | Faye <i>et al.</i> | 699 | Yes | Ret | Hospitals in Conakry area, undefined | Not applicable | 01/03/2014 | 28/02/2015 | 01/12/2015 | (1/4) Donka Hospital, (1/3) French Military Hospital, (1/3) Conakry Healthcare Worker ETU |
| | 26134358 | Bordes <i>et al.</i> | 22 | No | Pro | Conakry French Military ETU | French Military | xx/01/2015 | xx/04/2015 | 02/07/2015 | Yes (2/3) |
| | 26338789 | Cournac <i>et al.</i> | 22 | No | Pro | Conakry French Military ETU | French Military | xx/01/2015 | xx/04/2015 | 03/09/2015 | Yes (3/3) |
| | 26541219 | Cotte <i>et al.</i> | 14 | No | Pro | Conakry Healthcare Workers ETU | French Military | xx/01/2015 | xx/03/2015 | 02/11/2015 | Yes (2/3) |
| | 26582958 | Janvier <i>et al.</i> | 14 | No | Ret | Conakry Healthcare Workers ETU | Unknown | unknown | unknown | 17/11/2015 | Yes(3/3) |
| | 25391486 | Barry <i>et al.</i> | 90 | No | Pro | Donka National Hospital* | DDITD & MSF | 25/03/2014 | 20/08/2014 | 23/10/2014 | Yes (2/5) |
| | 25770172 | Barry <i>et al.</i> | 89 | No | Pro | Donka National Hospital | DDITD & MSF | xx/03/2014 | xx/08/2014 | 13/03/2015 | Yes (3/5) |
| | 25992182 | Qureshi <i>et al.</i> | 70 | No | Ret | Donka National Hospital | DDITD & MSF | 25/03/2014 | 05/08/2014 | xx/02/2015 | Yes (4/5) |
| | 25372658 | Bah <i>et al.</i> | 37 | Yes | Ret | Donka National Hospital & Hopital de l'Amite Sino-Guineene | MSF | 25/03/2014 | 26/04/2014 | 05/11/2014 | Yes (5/5) |
| | 27638946 | Kerber <i>et al.</i> | 1231 | Yes | Ret | Hospitals in Gueckedo, undefined | Multiple | 30/03/2014 | 30/03/2015 | 16/09/2016 | No |
| 28352651 | Vernet <i>et al.</i> | 97 | Yes | Pro | Macenta and Nzerekore ETU | IFRC France, ALIMA | 29/11/2014 | 31/01/2015 | 23/03/2017 | Yes (1/2) | |
| 27928085 | Loubet <i>et al.</i> | 76 | No | Ret | Nzerekore ETU | ALIMA | 02/12/2014 | 23/02/2015 | 10/10/2016 | Yes (2/2) | |
| Sierra Leone | 27806732 | Ji <i>et al.</i> | 285 | No | Ret | Freetown China-SL Friendship Hospital* ^ | Chinese Medical Team | 01/10/2014 | 21/03/2015 | 03/11/2016 | Yes (1/6) |
| | 26523640 | Li <i>et al.</i> | 288 | No | Ret | Freetown China-SL Friendship Hospital | Chinese Medical Team | 01/10/2014 | 20/03/2015 | 30/10/2015 | Yes (2/6) |
| | 27317404 | Xu <i>et al.</i> | 139 | No | Ret | Freetown China-SL Friendship Hospital | Chinese Medical Team | 15/11/2014 | 18/01/2015 | 14/06/2016 | Yes (3/6) |
| | 26223324 | Yan <i>et al.</i> | 85 | No | Ret | Freetown China-SL Friendship Hospital | Chinese Medical Team | 01/10/2014 | 09/11/2014 | 30/07/2015 | Yes (4/6) |
| | 26398207 | Zhang <i>et al.</i> | 63 | No | Mix | Freetown China-SL Friendship Hospital | Chinese Medical Team | 01/10/2014 | 18/01/2015 | 23/09/2015 | Yes (5/6) |
| | 25995207 | Qin <i>et al.</i> | 61 | No | Ret | Freetown China-SL Friendship Hospital | Chinese Medical Team | 01/10/2014 | 14/11/2014 | 20/05/2015 | Yes (6/6) |
| | 26551684 | Lanini <i>et al.</i> | 84 | No | Ret | Emergency NGO ETU, Freetown | Emergency | 13/12/2014 | 20/04/2015 | 09/11/2015 | No |
| | 28151955 | Hartley <i>et al.</i> | 158 | No | Ret | GOAL-Mathaska ETU | GOAL Global | 14/12/2014 | 15/11/2015 | 02/02/2017 | No |
| | 28258817 | Waxman <i>et al.</i> | 254 | Yes | Ret | Lunsar, Makeni, Kambia ETU | IMC | 01/12/2014 | 15/10/2015 | 28/02/2017 | No |
| | 27268303 | Haaskjold <i>et al.</i> | 31 | No | Ret | Moyamba ETU | Medicos del Mundo | 19/12/2014 | 17/02/2015 | 15/09/2016 | Yes (1/2) |
| | 27334891 | Arranz <i>et al.</i> | 31 | No | Ret | Moyamba ETU | Medicos del Mundo | xx/12/2014 | xx/03/2015 | 22/06/2016 | Yes (2/2) |
| | 26812579 | Crowe <i>et al.</i> | 151 | Yes | Ret | Bo District ETU* | MSF | 12/09/2014 | 07/01/2015 | xx/02/2016 | Yes (1/2) |
| | 26551677 | de La Vega <i>et al.</i> | 632 | No | Ret | Kailahun ETU | MSF | 01/07/2014 | 30/11/2014 | 09/11/2015 | Yes (1/4) |
| | 26002981 | Fitzpatrick <i>et al.</i> | 525 | No | Ret | Kailahun ETU | MSF | 26/06/2014 | 12/10/2014 | 22/05/2015 | Yes (2/4) |
| | 25565430 | Dallatomasina <i>et al.</i> | 489 | No | Ret | Kailahun ETU | MSF | 23/06/2014 | 05/10/2014 | 02/03/2015 | Yes (3/4) |
| | 28459838 | Theocharopoulos <i>et al.</i> | 249 | Yes | Ret | Kailahun (n=210), Magburaka (n=118), and Bo (n=44) | MSF | 12/09/2014 | 21/03/2015 | 01/05/2017 | (4/4) Kailahun, (2/2) Bo |
| | 26271406 | Hunt <i>et al.</i> | 118 | No | Pro | Kerry Town | Save the Children | 08/12/2014 | 09/01/2015 | 11/08/2015 | No |
| 25353969 | Schieffelin <i>et al.</i> | 87 | No | Ret | Kenema Government Hospital | SL government | 25/05/2014 | 18/06/2014 | 29/10/2014 | No | |
| 25539447 | Ansumana <i>et al.</i> | 581 | No | Ret | Hastings Police Training School | Unknown | 20/09/2014 | 07/12/2014 | 24/12/2014 | No | |
| Liberia | 25845607 | Levine <i>et al.</i> | 160 | No | Ret | Bong County ETU | IMC | 15/09/2014 | 04/01/2015 | 03/04/2015 | No |
| | 26735991 | Gignoux <i>et al.</i> | 381 | No | Ret | Foya ETU | MSF | 05/06/2014 | 24/10/2014 | 07/01/2016 | No |
| | 27531847 | Rosenke <i>et al.</i> | 1182 | No | Ret | Eternal Love Winning Africa 3 | MSF | xx/08/2014 | xx/02/2015 | 15/08/2016 | No |
| All | 25539446 | WHO <i>et al.</i> | 5564 | Yes | Ret | not applicable | not applicable | 30/12/2013 | 24/11/2014 | 24/12/2014 | Comparison data only |

Figure 1: Abbreviations used: Ret is retrospective; Pro is prospective; Mix is mixed prospective and retrospective enrolment; SL is Sierra Leone; DDITD is Donka Department of Infectious and Tropical Diseases; xx is date unknown. * is status changed from holding unit to ETC; ^ is for ETC known by various names. The location of facilities is shown in appendix 8

2 Appendix 2

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| Study details | | | Markers of data quality | | | | | | Markers of clinical utility | | | |
|---------------|------------------------|-------------------------------|---|---|--|---|---|--|-------------------------------|---|---------------------------------|---|
| | PubMed ID | Author | Source of clinical data is defined S = source document defined T = time of data collection provided | Temporal indicators for data D = exact days M = closest month | Confirmed case is defined LC = laboratory confirmed A = details of assay | Inclusion and exclusion criteria clearly defined D = detailed C = "all confirmed" CO = "confirmed and outcome known" CC = "confirmed and complete data" | Records proportion of cases where clinical outcome is unknown | Statement or data^ demonstrating completeness of other clinical data | Average* of patients provided | States if any patients were pregnant NS = no statement | Average* viral load/Ct provided | Average* symptom onset to admission interval provided |
| Guinea | 26625118 | Faye <i>et al.</i> | T & S | D | LC | D | Yes | Yes | yes | NS | yes | yes |
| | 26134358 | Bordes <i>et al.</i> | T | M | No | C | Yes | No | yes | NS | yes | no |
| | 26338789 | Cournac <i>et al.</i> | T | M | LC | C | Yes | No | yes | NS | yes | yes* |
| | 26541219 | Cotte <i>et al.</i> | No | M | No | C | Yes | No | yes | NS | no | yes* |
| | 26582958 | Janvier <i>et al.</i> | No | No | No | C | Yes | No | yes | NS | yes | yes |
| | 25391486 | Barry <i>et al.</i> | No | D | LC + A | C | Yes | No | yes | NS | no | yes |
| | 25770172 | Barry <i>et al.</i> | T & S | M | LC | C | Yes | No | yes | NS | no | yes |
| | 25992182 | Qureshi <i>et al.</i> | T & S | D | LC | O | Yes | No | yes | NS | no | yes |
| | 25372658 | Bah <i>et al.</i> | T & S | D | LC + A | C | Yes | No | yes | NS | yes | yes |
| | 27638946 | Kerber <i>et al.</i> | T & S | D | LC + A | D | Yes | Yes | yes | NS | yes | no |
| | 28352651 | Vernet <i>et al.</i> | S | D | LC + A | D | Yes | No | yes | yes | yes | yes |
| | 27928085 | Loubet <i>et al.</i> | T & S | D | LC | C | Yes | No | yes | NS | no | yes |
| | Sierra Leone | 27806732 | Ji <i>et al.</i> | no | D | LC + A | C | Yes | No | yes | yes | yes |
| 26523640 | | Li <i>et al.</i> | T & S | D | LC + A | CO | Yes | Yes | yes | NS | yes | no |
| 27317404 | | Xi <i>et al.</i> | no | D | LC + A | C | Yes | No | yes | NS | yes | yes |
| 26223324 | | Yan <i>et al.</i> | T & S | D | LC + A | CO | Yes | No | yes | NS | yes | yes |
| 26398207 | | Zhang <i>et al.</i> | T & S | D | LC + A | CO | Yes | Yes | no | NS | no | no |
| 25995207 | | Qin <i>et al.</i> | no | D | No | CO | Yes | No | yes | NS | no | yes |
| 26551684 | | Lanini <i>et al.</i> | no | D | No | D | Yes | No | yes | NS | yes | no |
| 28151955 | | Hartley <i>et al.</i> | T & S | D | LC + A | C | Yes | Yes | no | NS | no | no |
| 28258817 | | Waxman <i>et al.</i> | T & S | D | LC + A | D | Yes | Yes | yes | NS | no | no |
| 27268303 | | Haaskjold <i>et al.</i> | no | D | LC + A | C | Yes | No | yes | NS | yes | yes |
| 27334891 | | Arranz <i>et al.</i> | T & S | M | LC | C | Yes | No | yes | NS | no | yes |
| 26812579 | | Crowe <i>et al.</i> | S | D | LC + A | D | Yes | Yes | yes | NS | yes | yes |
| 26551677 | | de La Vega <i>et al.</i> | no | D | LC + A | CC | Yes | Yes | yes | NS | yes | yes |
| 26002981 | | Fitzpatrick <i>et al.</i> | S | D | LC + A | CO | Yes | No | yes | NS | yes | yes |
| 25565430 | | Dallatomasina <i>et al.</i> | T & S | D | LC | C | Yes | Yes | yes | NS | no | yes |
| 28459838 | | Theocharopoulos <i>et al.</i> | T & S | D | LC + A | C | Yes | No | yes | NS | yes | yes |
| 26271406 | | Hunt <i>et al.</i> | S | D | LC + A | D | Yes | No | yes | NS | yes | yes |
| 25353969 | | Schieffelin <i>et al.</i> | S | D | LC + A | C | Yes | Yes | no | yes | yes | yes |
| 25539447 | Ansumana <i>et al.</i> | no | D | no | C | no | no | no | NS | no | no | |
| Liberia | 25845607 | Levine <i>et al.</i> | T & S | D | LC + A | C | Yes | no | yes | NS | yes | yes |
| | 26735991 | Gignoux <i>et al.</i> | T & S | D | LC + A | CC | Yes | yes | yes | NS | yes | yes |
| | 27531847 | Rosenke <i>et al.</i> | No | M | LC + A | CO | Yes | Yes | yes | NS | yes | no |

Figure 2: Quality of evidence in included articles. such as denominators for each variable.

3 Appendix 3

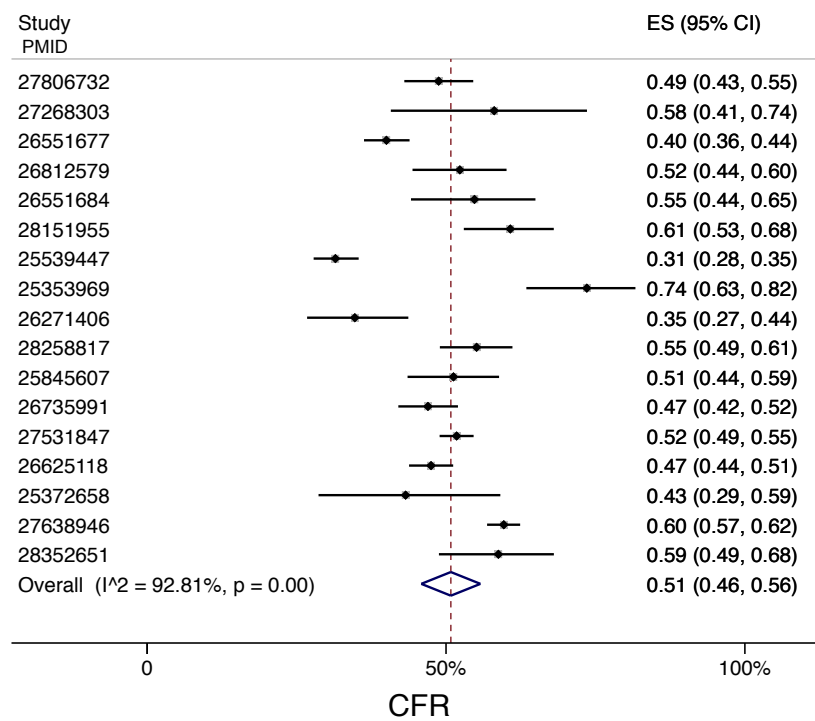
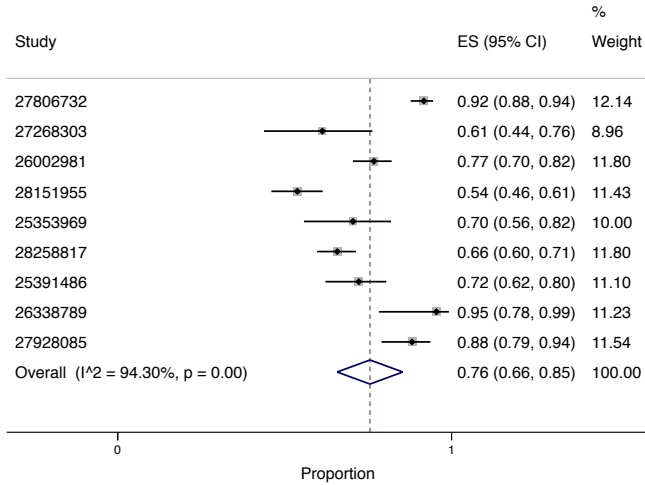


Figure 3: Meta-analysis for case fatality rate. Analysis includes the primary data-set only. ES is effect size.

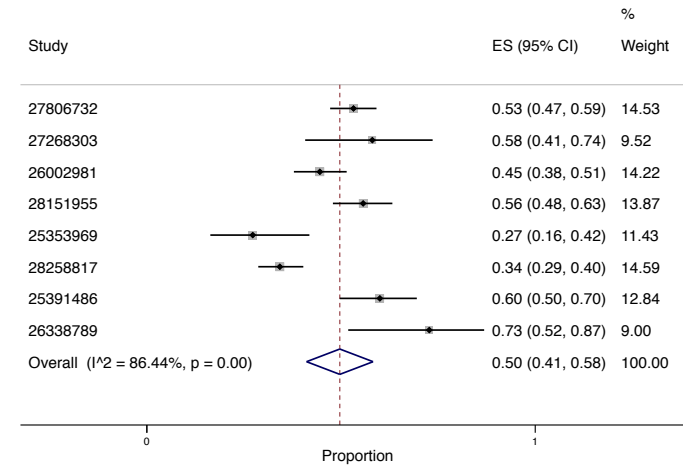
4 Appendix 4

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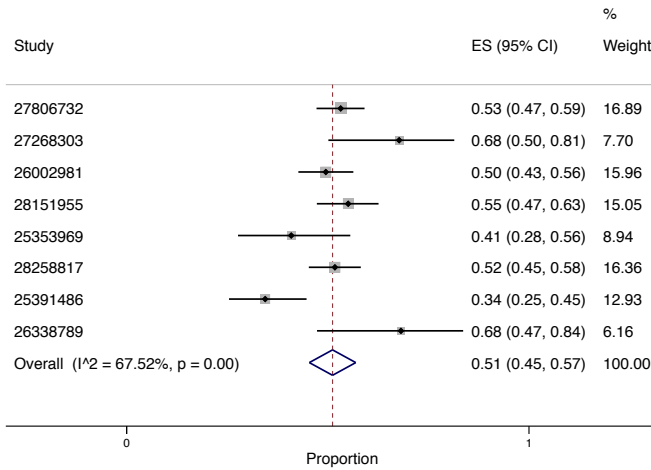
Fever on admission



Vomiting on admission



Diarrhoea on admission



Confused on admission

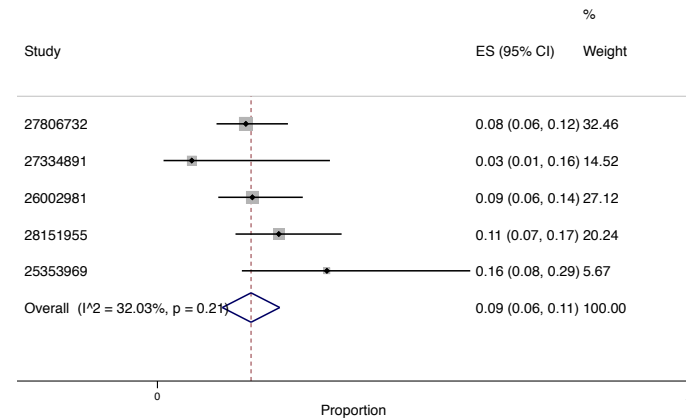
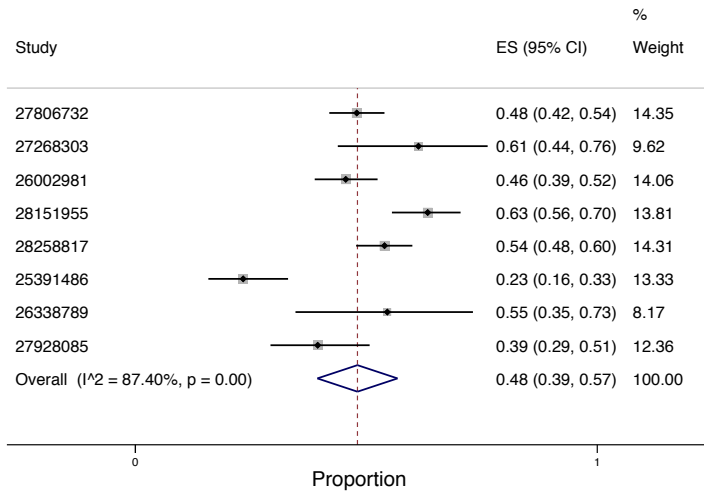
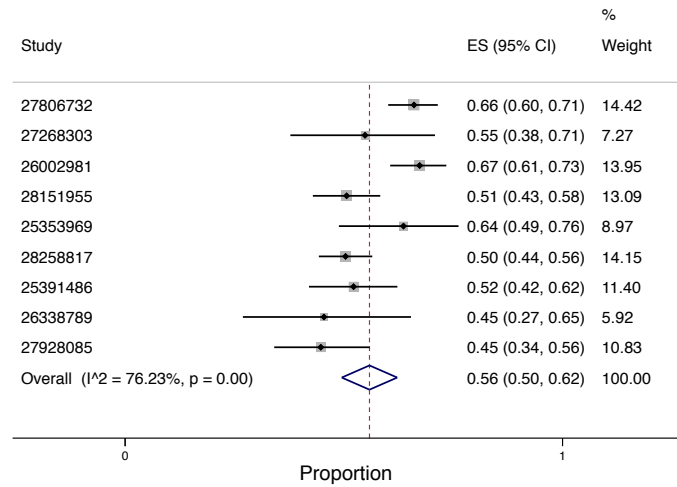


Figure 4: Proportion of EVD patients presenting with a symptom - panel A. ES refers to effect size

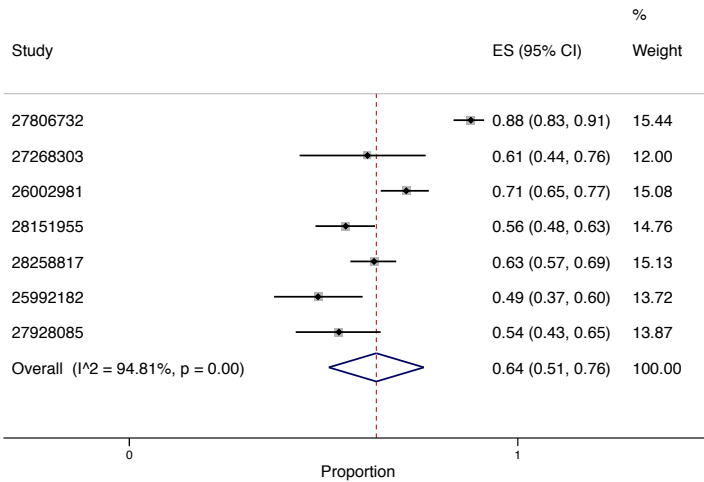
Myalgia on admission



Headache on admission



Anorexia on admission



Abdominal pain on admission

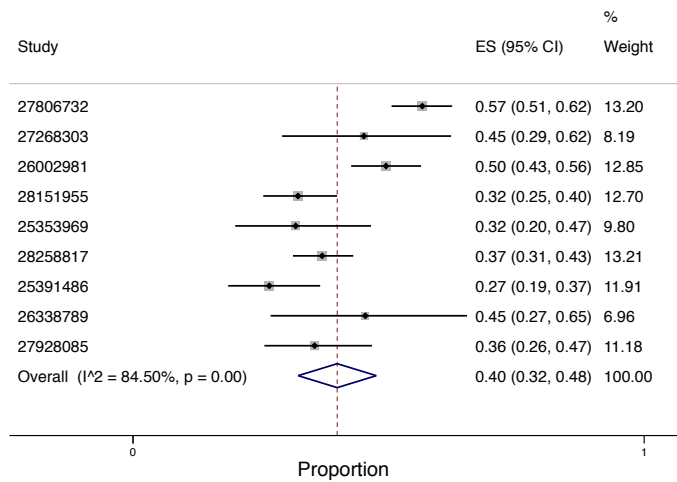
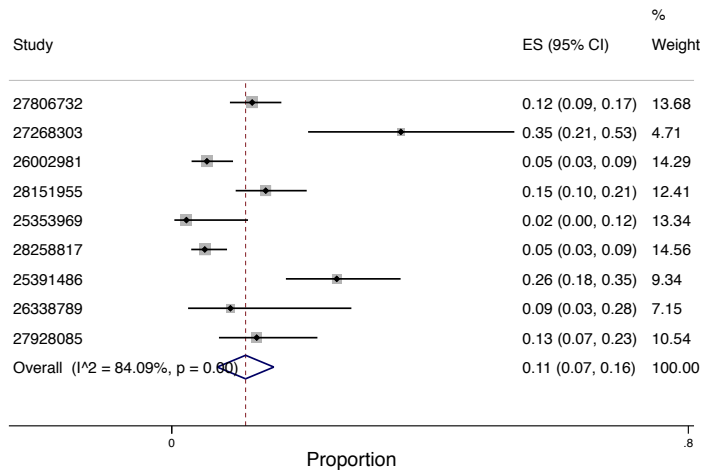
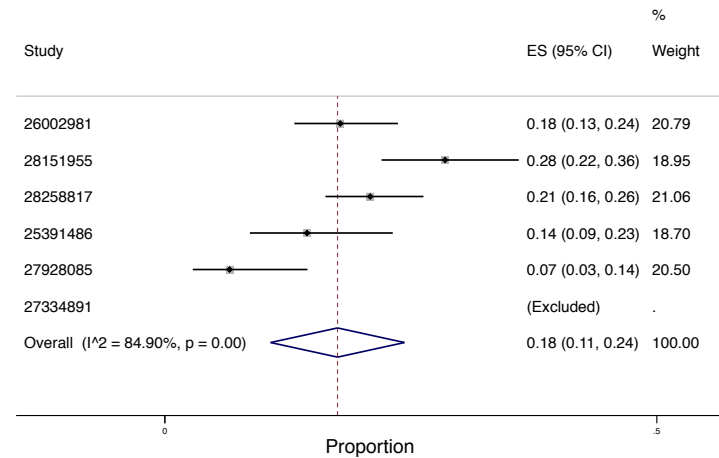


Figure 5: Proportion of EVD patients presenting with a symptom - panel B.

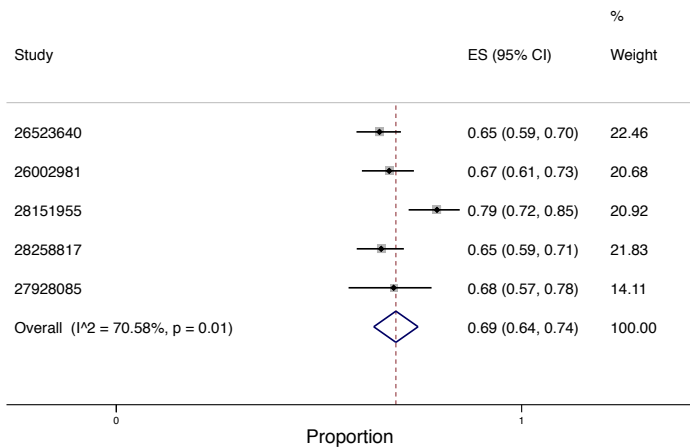
Haemorrhagic symptoms on admission



Difficulty breathing on admission



Lethargy on admission



Difficulty swallowing on admission

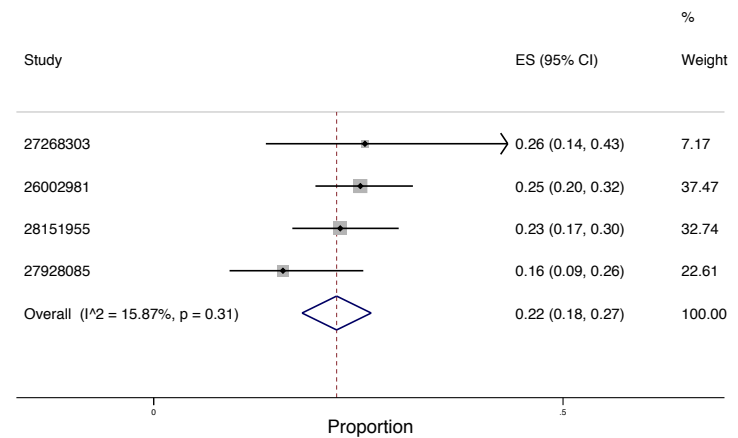


Figure 6: Proportion of EVD patients presenting with a symptom - panel C.

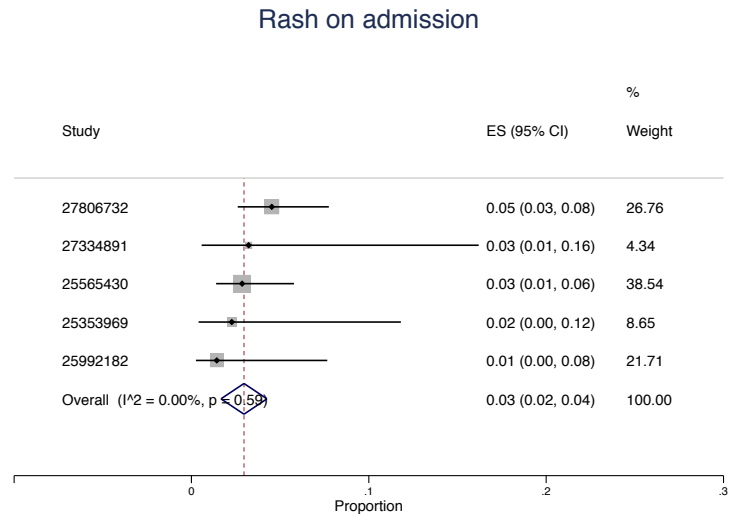
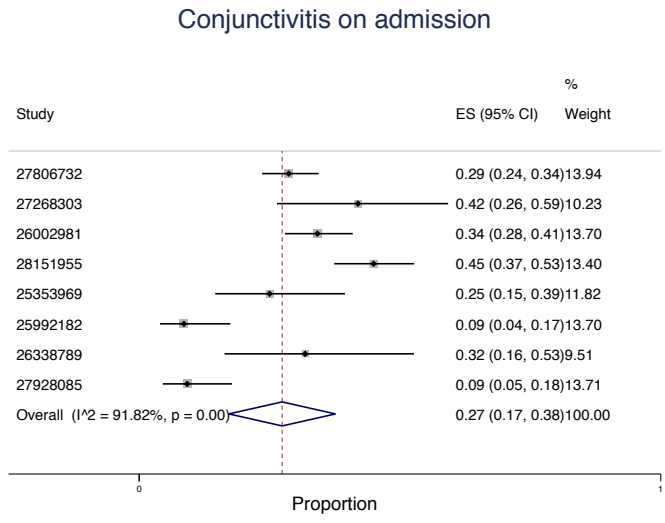
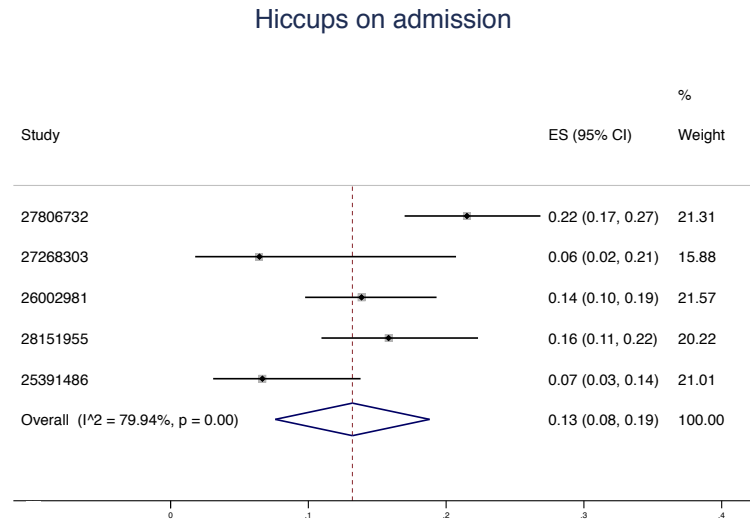
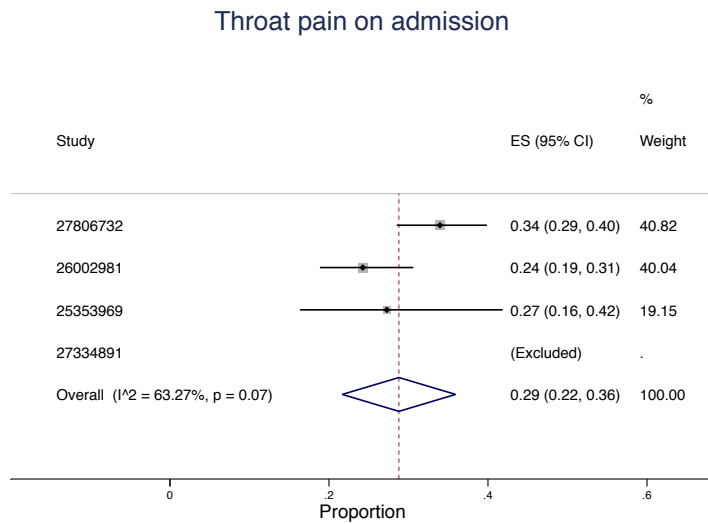


Figure 7: Proportion of EVD patients presenting with a symptom - panel D.

5 Appendix 5

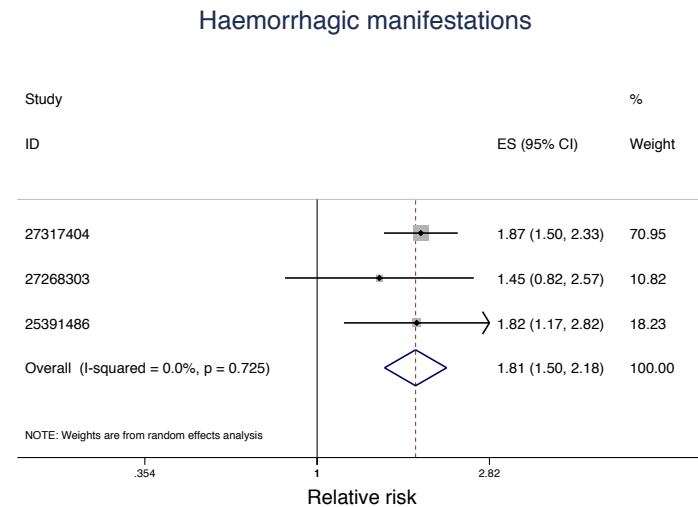
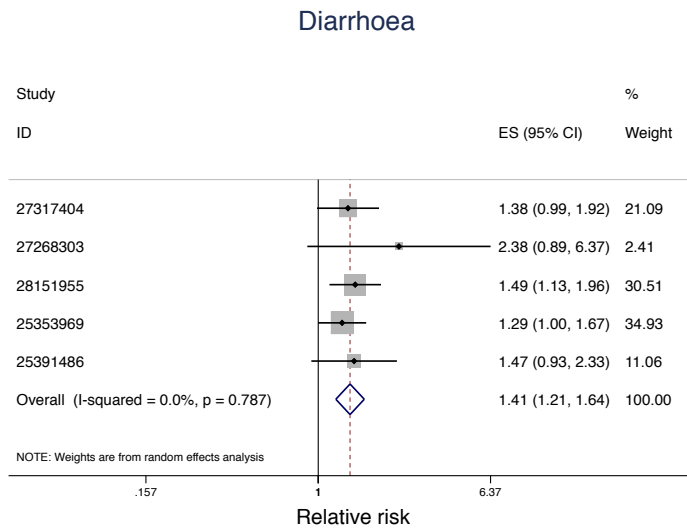
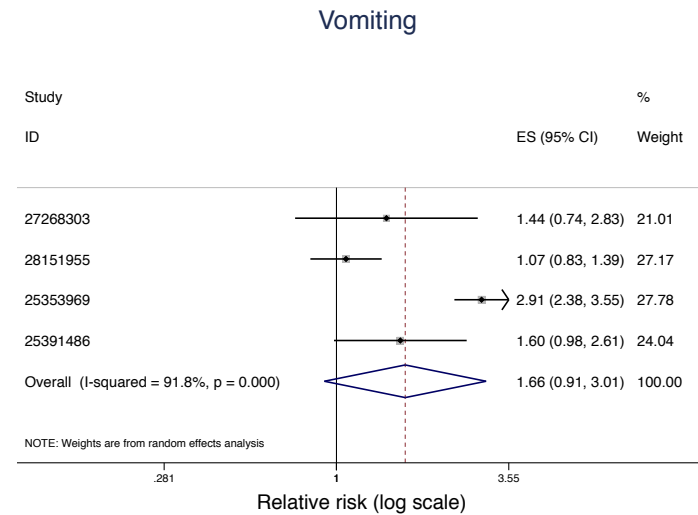
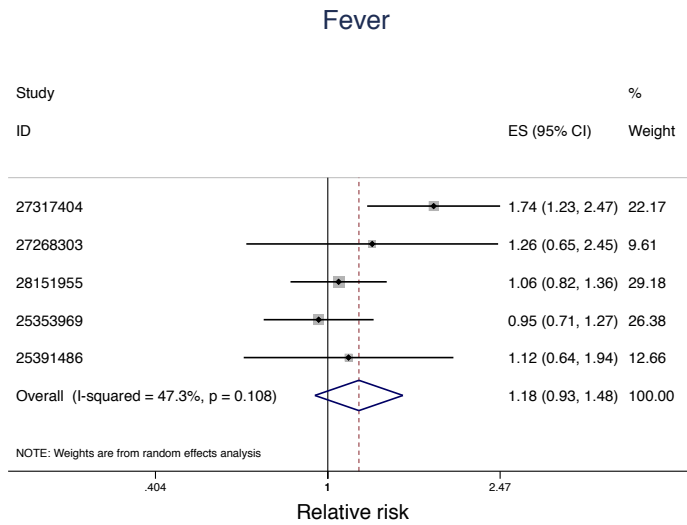
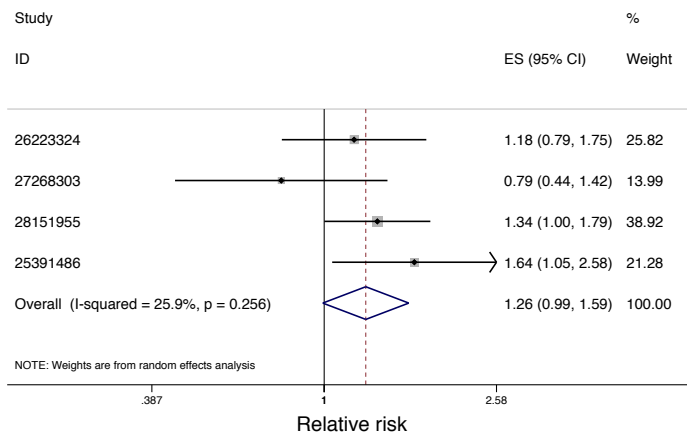
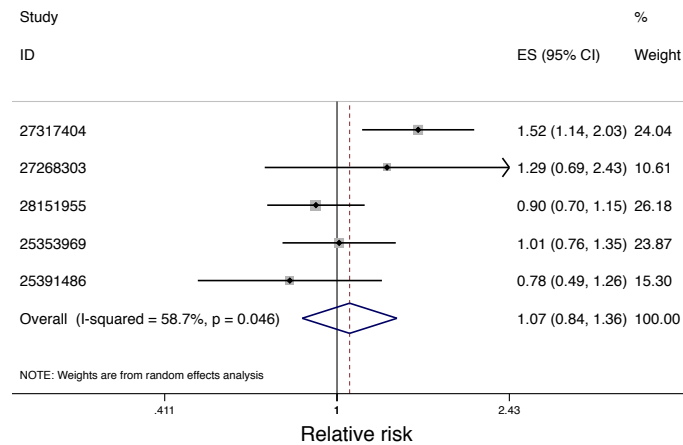


Figure 8: Relative risk of death in EVD patients presenting with a given symptom - panel A

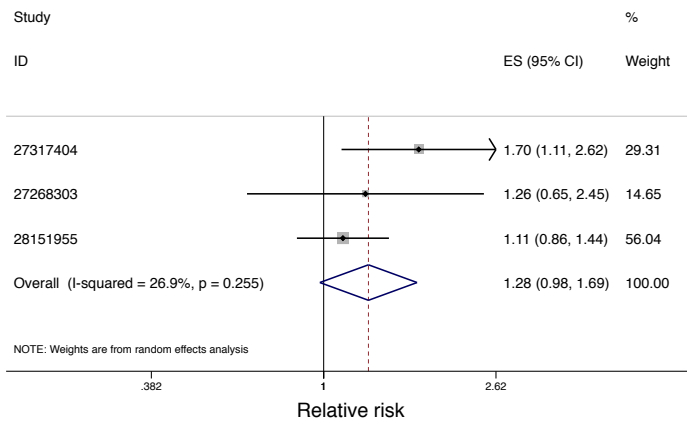
Myalgia+/- Arthralgia



Headache



Anorexia



Breathing difficulties

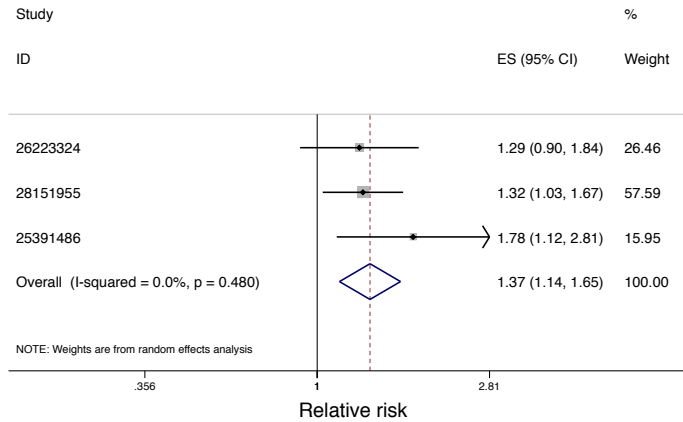
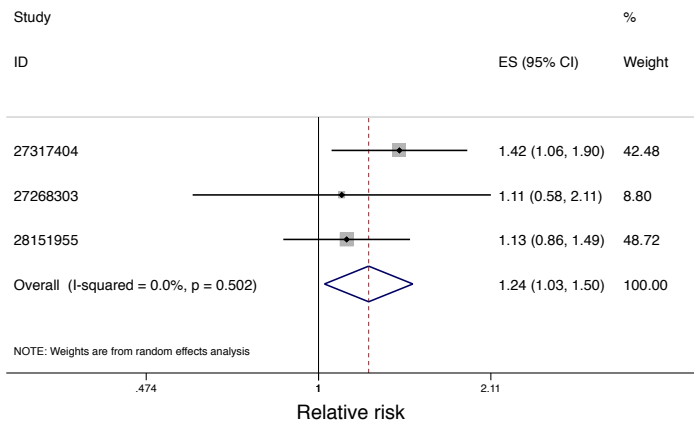
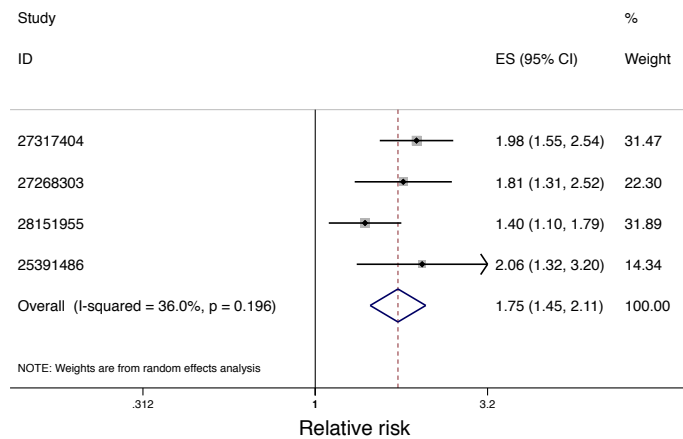


Figure 9: Relative risk of death in EVD patients presenting with a given symptom - panel B

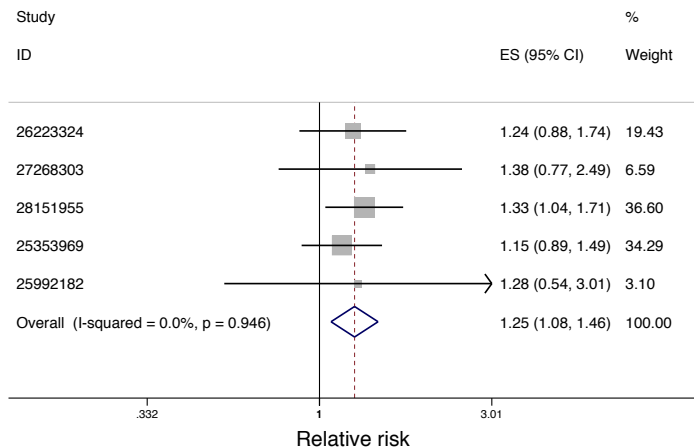
Difficulty swallowing



Hiccups



Conjunctivitis



Confused

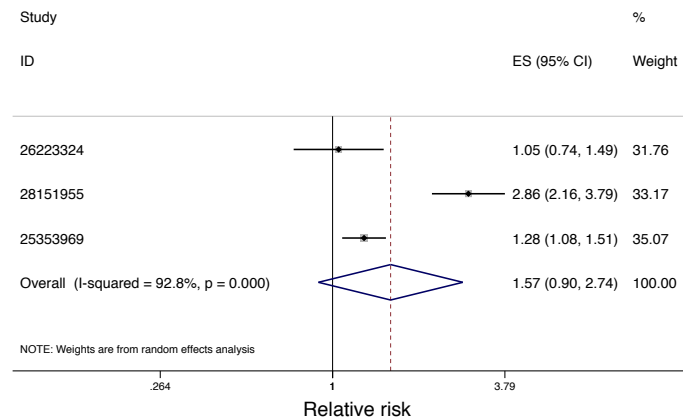


Figure 10: Relative risk of death in EVD patient presenting with a given symptom - panel C.

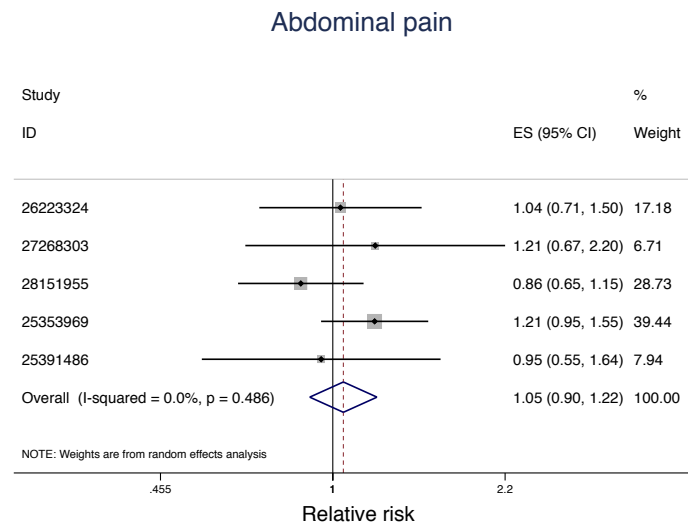


Figure 11: Relative risk of death in EVD patient presenting with a given symptom - panel D. Forest plots are only shown for symptoms with three or more articles reporting data.

6 Appendix 6

| Study details | | | Markers of transparency | |
|---------------|------------------------|-------------------------------|--|---|
| | PubMed ID | Author | Access to individual patient level data NS = no statement | Acknowledges that cohort is otherwise published n/a = only dataset no/c = no, and cites duplicate data without linking |
| Guinea | 26625118 | Faye <i>et al.</i> | No (1) | no |
| | 26134358 | Bordes <i>et al.</i> | NS | no |
| | 26338789 | Cournac <i>et al.</i> | NS | no |
| | 26541219 | Cotte <i>et al.</i> | NS | no |
| | 26582958 | Janvier <i>et al.</i> | NS | no |
| | 25391486 | Barry <i>et al.</i> | NS | no |
| | 25770172 | Barry <i>et al.</i> | NS | no |
| | 25992182 | Qureshi <i>et al.</i> | NS | no |
| | 25372658 | Bah <i>et al.</i> | NS | no |
| | 27638946 | Kerber <i>et al.</i> | NS | n/a |
| | 28352651 | Vernet <i>et al.</i> | NS | no |
| | 27928085 | Loubet <i>et al.</i> | NS | no |
| | Sierra Leone | 27806732 | Ji <i>et al.</i> | NS |
| 26523640 | | Li <i>et al.</i> | NS | yes |
| 27317404 | | Xi <i>et al.</i> | NS | no/c |
| 26223324 | | Yan <i>et al.</i> | NS | no |
| 26398207 | | Zhang <i>et al.</i> | No (2) | no |
| 25995207 | | Qin <i>et al.</i> | NS | no |
| 26551684 | | Lanini <i>et al.</i> | NS | n/a |
| 28151955 | | Hartley <i>et al.</i> | No (2) | n/a |
| 28258817 | | Waxman <i>et al.</i> | NS | no**/c |
| 27268303 | | Haaskjold <i>et al.</i> | NS | no |
| 27334891 | | Arranz <i>et al.</i> | Yes (3) | no |
| 26812579 | | Crowe <i>et al.</i> | NS | no |
| 26551677 | | de La Vega <i>et al.</i> | NS | no |
| 26002981 | | Fitzpatrick <i>et al.</i> | NS | no |
| 25565430 | | Dallatomasina <i>et al.</i> | NS | no |
| 28459838 | | Theocharopoulos <i>et al.</i> | Yes (4) | no/c |
| 26271406 | | Hunt <i>et al.</i> | NS | n/a |
| 25353969 | | Schieffelin <i>et al.</i> | NS | n/a |
| 25539447 | Ansumana <i>et al.</i> | NS | n/a | |
| Liberia | 25845607 | Levine <i>et al.</i> | NS | no** |
| | 26735991 | Gignoux <i>et al.</i> | NS | n/a |
| | 27531847 | Rosenke <i>et al.</i> | NS | n/a |

Figure 12: Indicators of data transparency for included articles. **Cohort is duplicated in another dataset that is not included in this review, as it did not meet eligibility.

7 Appendix 7

| PMID | n | Mean | SD | Med | IQR1 | IQR3 | Min | Max | Cat | Other |
|----------|------|------|------|-----|------|------|------|-----|-----|-------|
| 25353969 | 98 | . | . | . | . | . | . | . | . | . |
| 25372658 | 37 | . | . | 38 | 28 | 46 | 19 | 61 | . | . |
| 25391486 | 90 | 34.0 | 14 | . | . | . | . | . | Y | . |
| 25539447 | n/a | . | . | . | . | . | . | . | . | . |
| 25565430 | 489 | . | . | 28 | 17 | 40 | 0.3 | 80 | . | . |
| 25770172 | 89 | . | . | 32 | 25 | 44 | . | . | . | . |
| 25845607 | 160 | . | . | 33 | . | . | . | . | . | (1) |
| 25992182 | 69 | 34.0 | 14.1 | . | . | . | . | . | Y | . |
| 25995207 | 61 | 26.4 | 5.81 | 28 | . | . | 1.2 | 67 | Y | . |
| 26002981 | 525 | . | . | 27 | 16 | 40 | . | . | . | . |
| 26134358 | 22 | 33.0 | 9 | . | . | . | . | . | . | . |
| 26223324 | 108 | 27.4 | 13.6 | . | . | . | . | . | Y | . |
| 26271406 | 118 | 25.9 | 14.7 | . | . | . | . | . | Y | . |
| 26338789 | 22 | 32.9 | 9.2 | . | . | . | . | . | . | . |
| 26398207 | 63 | . | . | . | . | . | . | . | Y | . |
| 26523640 | 288 | . | . | 28 | 17 | 38 | . | . | Y | . |
| 26541219 | 14 | . | . | 31 | 27 | 33 | . | . | . | . |
| 26551677 | 632 | 26.9 | . | 25 | . | . | 0.3 | 75 | Y | . |
| 26551684 | 84 | . | . | . | . | . | . | . | Y | . |
| 26582958 | 14 | 30.0 | 7 | . | . | . | . | . | . | . |
| 26625118 | 699 | 31.0 | . | . | 20 | 42 | . | . | . | . |
| 26735991 | n/a | . | . | . | . | . | . | . | Y | . |
| 26812579 | 151 | . | . | . | . | . | . | . | . | (2) |
| 27268303 | 31 | . | . | 30 | . | . | 0.25 | 85 | . | . |
| 27317404 | 139 | 30.1 | 17.1 | 29 | . | . | 0.5 | 75 | . | . |
| 27334891 | 31 | . | . | 30 | 17 | 40 | . | . | . | . |
| 27531847 | 1110 | 29.8 | 15.6 | . | . | . | 0.01 | 83 | Y | . |
| 27638946 | 1225 | . | . | 30 | 19 | 45 | . | . | . | . |
| 27806732 | 285 | 29.2 | 16.4 | 28 | 19 | 38 | 0.08 | 80 | Y | . |
| 27928085 | 76 | . | . | 28 | 18 | 48 | . | . | Y | . |
| 28151955 | 158 | . | . | . | . | . | . | . | . | . |
| 28258817 | 254 | . | . | . | . | . | . | . | . | (2) |
| 28352651 | 97 | 30.1 | . | . | . | . | 1 | 68 | Y | . |
| 28459838 | 248 | . | . | 28 | 17 | 38 | . | . | Y | . |

Figure 13: Mapping of reporting of patient age in included articles. N is the number of patients with age recorded; SD is standard deviation; Med is median; IQR1 is the first interquartile range; IQR3 is the third interquartile range; (1) reports the 95% confidence interval as the distribution; (2) reports ages of sub-groups only.

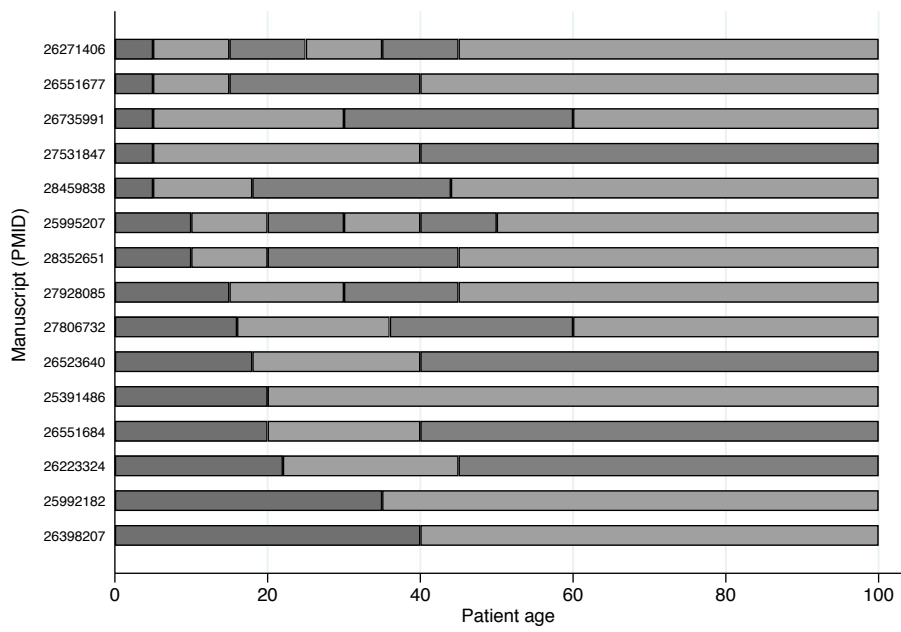


Figure 14: Age categories selected for stratification in included articles

| Article | Patients who survived | | | | | | | | | Patients who died | | | | | | | | | All patients | | | | | | | | | Other | |
|----------|-----------------------|------|-------|------|------|------|-----|---------|-------|-------------------|-------|--------|------|------|-------|-----|---------|-------|--------------|------|------|------|------|------|------|---------------|---|---|--|
| | n | mean | SD | Med | IQR1 | IQR3 | Min | Max | 95%CI | n | mean | SD | Med | IQR1 | IQR3 | Min | Max | 95%CI | n | mean | SD | Med | IQR1 | IQR3 | Min | Max | Unit | Categorisation of viral load | |
| !7806732 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | log copies/ml | VL = <10 ⁶ , >10 ⁶ | |
| !6523640 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | 288 | 6.68 | 5.3 | 7.75 | . | . | . | log copies/ml | VL = <10 ⁶ , >10 ⁶ | |
| !7317404 | 63 | . | . | . | . | . | . | . | . | 76 | . | . | . | . | . | . | . | . | 139 | . | . | . | . | . | . | copies/ml | VL = <10 ⁵ , 10 ⁵ -10 ⁷ , >10 ⁷ | | |
| !6223324 | 34 | 25.2 | 4.1 | . | . | . | . | . | . | 51 | 28.7 | 5.7 | . | . | . | . | . | . | 85 | 26.3 | 4.4 | . | . | . | . | Ct | . | | |
| !6398207 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | VL = <10 ⁶ , >10 ⁶ | |
| !5995207 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !7268303 | 13 | . | . | 26.5 | . | . | 22 | 36.5 | . | 17 | . | . | 20.5 | . | 15 | 23 | . | . | 30 | . | . | 22 | . | 15 | 36.5 | Ct | . | | |
| !7334891 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !6551677 | 379 | 6.18 | . | . | . | . | . | 6.0-6.3 | . | 253 | 4.02 | . | . | . | . | . | 3.9-4.2 | . | 632 | . | . | . | . | . | . | . | log GEO/mL | Ct = <20, 20-30, >30 | |
| !6002981 | 255 | . | . | 31 | 25 | 34 | . | . | . | 270 | . | . | 22 | 20 | 25 | . | . | . | 346 | . | . | . | . | . | . | . | Ct | Ct = <25, ≥25 | |
| !5565430 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !8459838 | . | . | . | . | . | . | . | . | . | 110 | . | . | . | . | . | . | . | . | . | 249 | . | 26 | 20 | 32 | 14 | 38 | Ct | Ct = <22, ≥22 | |
| !6812579 | 72 | 27.9 | . | . | . | . | . | . | . | 72 | 20.5 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | Ct | Ct = <24, ≥24 | |
| !6551684 | 38 | 7.11 | . | . | . | . | . | . | . | 46 | 8.36 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | log copies/ml | . | | |
| !8151955 | 62 | 24.9 | . | . | . | . | . | . | . | 96 | 20.6 | . | . | . | . | . | . | . | . | 144 | 22 | . | . | 13.5 | 37.9 | Ct | Ct = <20, ≥20 | | |
| !5539447 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !5353969 | . | . | . | . | . | . | . | . | . | 45 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | copies/ml | VL = <10 ⁵ , 10 ⁵ -10 ⁷ , >10 ⁷ | |
| !6271406 | 73 | 23.4 | 4.3 | . | . | . | . | . | . | 39 | 18.3 | 2.7 | . | . | . | . | . | . | . | 112 | 21.4 | 4.5 | . | . | . | . | Ct | Ct = <20, ≥20 | |
| !8258817 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !5845607 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !6735991 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | 381 | . | 19.4 | 17.1 | 22.8 | . | . | Ct | . | |
| !7531847 | 570 | 28.4 | 4.3 | . | . | . | . | . | . | 612 | 25.9 | 3.8 | . | . | . | . | . | . | . | 1182 | 27 | 4.7 | . | . | . | . | Ct | Ct = <25, 25 - <30, 30 to <37 | |
| !6625118 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | 548 | . | . | . | . | . | . | log copies/ml | log VL = <104.4, 104.4-105.2, ≥ 105.2 | |
| !5391486 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !5770172 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !5992182 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !6541219 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !6582958 | . | . | . | . | . | . | . | . | . | 5 | . | . | 19.5 | . | . | . | . | . | . | 14 | . | . | . | . | . | . | Ct | Ct = <20, 20-30, >30 | |
| !6134358 | 16 | 23 | 3.1 | . | . | . | . | . | . | 6 | 17.7 | 3.8 | . | . | . | . | . | . | . | 22 | 21.6 | 3.9 | . | . | . | . | Ct | . | |
| !6338789 | 16 | 23 | 3.1 | . | . | . | . | . | . | 6 | 17.7 | 3.8 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | Ct | . | |
| !5372658 | 21 | 8207 | 17189 | 1079 | 148 | 5059 | . | . | . | 16 | 68361 | 111340 | 1915 | 141 | 12998 | . | . | . | . | . | . | . | . | . | . | copies/ml | VL <100,000, >100,000 | | |
| !7638946 | 479 | . | . | 23.2 | 20.4 | 26.5 | . | . | . | 719 | . | . | 18.1 | 16.2 | 20.8 | . | . | . | . | . | . | . | . | . | . | . | Ct | . | |
| !7928085 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | |
| !8352651 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | FFU/mL | . | |

Figure 15: Mapping of reporting of viral load in included articles. N is the number of patients with age recorded; SD is standard deviation; Med is median; IQR1 is the first interquartile range; IQR3 is the third interquartile range; 95%CI is the 95% confidence interval.

8 Appendix 8

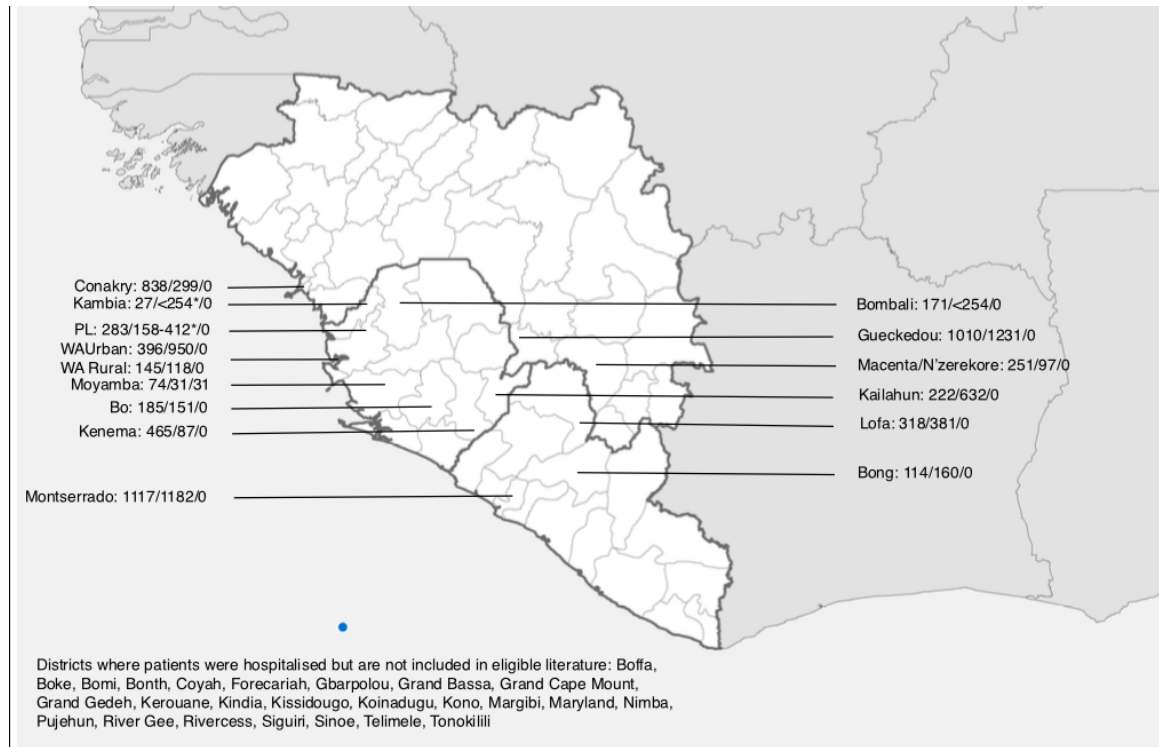


Figure 16: Map of most affected countries showing geographical distribution of included ETCs. The numbers represent *the number of hospitalised cases with known outcome from WHO data / the number of hospitalised cases in the included articles / the number of hospitalised cases with individual level patient data accessible* for each region. Map boundaries shown are administrative 2 boundaries for Sierra Leone and administrative 1 boundaries for Liberia and Guinea, consistent with WHO regional reporting during the outbreak. *Data were across two administrative regions.