

Supplementary Tables

S1 Table. Characteristics of selected studies for animal tuberculosis in Nigeria, 1979 – 2021

Study ID	Sampling time	Study type	Study location	Sampling season	Species	Detection method	Mycobacterial isolation	MTBC identification	Positive samples/total samples examined	Reported prevalence	Prevalence in female and male animals	Prevalence in old and young animals	Quality score
Okeke et al. (2016)	2007 - 2012	PS	Plateau	U	cattle	PM	No	No	4658/51262	9.1%	No	No	5
Saidu et al. (2015)	U	PS	Bauchi	rainy	cattle	PM, ZN and Mol	No	Yes	120/800, 35/120 and 10/120	15.0%, 29.16% and 8.3%	ZN: 16.66% and 12.5%. Mol: 5.0% and 3.33%	U	9
Ibrahim et al. (2012)	2008 - 2009	PS	Jigawa	U	cattle	SCITT	No	No	10/922	1.10%	0.3% and 0.8%	1.0% and 0.1%	8
Damina et al. (2011)	2008 - 2009	PS	Plateau	dry	cattle	PM, ZN and Mol	No	Yes	150/3381, 124/3381 and 115/3381	4.4%, 3.7% and 3.4%	U	No	8
Alonge and Fasanmi (1979)	1975 - 1977	PS	Plateau, Bauchi, Borno, Kano, Sokoto, Niger, Kwara and Kaduna	U	cattle	PM	No	No	255/609	41.90%	No	No	6
Jajere et al. (2018a)	U	PS	Bauchi	rainy	cattle	PM, ZN and SCITT	No	No	51/2440, 48/2440 and 7/86	2.1%, 1.96% and 8.1%	PM and ZN: 1.2% and 0.77%. CITT: 4.6% and 3.4%	PM and ZN: 1.08% and 0.12%. CITT: 6.9% and 1.1%	8
Ibrahim et al. (2018)	2010 - 2014	PS	Bauchi and Gombe	U	cattle	SCITT	No	No	232/2116 and 463/3373	10.96% and 13.73%	Bauchi: 11.8% and 8.7%. Gombe: 12.8% and 12.5%	U	10
Oyekunle and Talabi (2013)	2007	PS	Ogun	U	cattle	CI	Yes	Yes	41/15520	0.26%	0.21% and 0.06%	U	6
Cadmus et al. (2008a)	2006	PS	Oyo	rainy	cattle	PM and CI	Yes	Yes	25/587 and 22/587	4.3% and 3.7%	4.5% and 3.6%	U	8
Agbalaya et al. (2020)	2017	PS	Lagos	dry	cattle	PM, ZN and LF	No	No	13/187, 13/187 and 48/187	7.0%, 7.0% and 25.7%	U	U	9
Jajere et al. (2018b)	2004 - 2013	PS	Bauchi	U	cattle	PM	No	No	1230/108,638	1.13%	2.1% and 0.23%	No	10
Cadmus et al. (2006)	U	PS	Oyo	U	cattle	CI and Mol	Yes	Yes	17/170	0.10%	No	No	6
Ejeh et al. (2013)	2008 - 2012	PS	Adamawa	U	cattle	PM	No	No	6612/74079	8.90%	9.9% and 7.4%	No	10
Ahmad et al. (2017a)	2014	PS	Zamfara	rainy	cattle	PM	No	No	226/3690	6.12%	65.0% and 35.0%	65.9% and 34.1%	10
Yohanna et al. (2008)	U	PS	Nasarawa	U	cattle	SCITT	No	No	29/199	15.00%	11.56% and 1.01%	1.0% and 2.51%	8
Abubakar et al. (2013)	U	PS	Abuja and Kaduna	U	cattle	SCITT	No	No	139/947	14.60%	No	U	7
Cadmus et al. (2010)	U	PS	Northwest, North-central and Southwest	U	cattle	SCITT	No	No	78/1360	5.74%	7.68% and 1.96%	6.92% and 4.27%	9
Cadmus and Arinola (2007)	U	PS	Oyo	U	cattle	PM, Hist and CI	Yes	Yes	39/94	41.50%	No	No	7

Bikom et al. (2021)	2013 - 2014	PS	Cross River	U	cattle	PM and ZN	No	No	76/1852 and 66/76	4.1% and 86.8%	6.2% and 2.6%	7.86% and 1.16%	10
Ibrahim et al. (2010)	U	PS	Jigawa	U	cattle	SCITT	No	No	10/922	1.08%	0.3% and 7.95%	1.6% and 0.8%	9
Makeri et al. (2018)	U	PS	Bauchi	U	cattle and wildlife	LF	No	No	88/750 and 30/250	11.7% and 12%	cattle: 11.8% and 11.5%	11.7% and 11.76%	9
Oluwasile et al. (2013)	2011 - 2012	PS	Ogun	U	cattle	PM	No	No	928/52,237	1.78%	No	No	9
Adesokan et al. (2019a)	U	PS	Ebonyi	U	cattle	CI and Mol	Yes	Yes	3/144 and 2/144	2.1% and 1.4%	No	No	8
Akinseye et al. (2018)	2013 - 2015	PS	Oyo	U	cattle	CI	Yes	Yes	39/1797	2.20%	2.9% and 0.7%	2.8% and 1.0%	9
Okeke et al. (2014)	2012	PS	Plateau	rainy	cattle	ZN and Mol	No	Yes	36/168 and 30/168	21.4% and 17.0%	24.1% and 16.7%	20.0% and 22.9%	10
Ejeh et al. (2014a)	2008 - 2012	PS	Benue	U	cattle	PM	No	No	1172/61654	1.90%	No	No	7
Atuman et al. (2018)	U	PS	Bauchi	U	cattle and wildlife	LF	No	No	30/300 and 13/97	10% and 13.4%	9.2% and 11.5%	No	9
Ogugua et al. (2021)	2018	PS	Enugu	rainy	cattle	PM	No	No	3/420	0.70%	0% and 0.79%	0.81% and 0%	9
Saidu et al. (2017)	2008 - 2015	PS	Gombe	U	cattle	PM	No	No	1202/154,562	0.78%	No	No	6
Akinbobola et al. (2017)	2013 - 2015	PS	Abuja	U	cattle	PM	No	No	772/106,628	0.72%	0.93% and 0.61%	No	8
Danbimi et al. (2016)	2015	PS	Bauchi	dry	goats	PM	No	No	4/12,429	0.03%	No	No	7
Okoro et al. (2014)	2011	PS	Enugu	U	cattle	PM, LF and CI	Yes	Yes	22/500, 59/500 and 11/500	4.4%, 11.8% and 2.2%	No	No	7
Lawan et al. (2020a)	2017 - 2018	PS	Borno	U	cattle	PM and ZN	No	No	62/664 and 41/664	9.3% and 6.2%	PM: 16.7% and 4.7%. ZN: 11.3% and 2.9%	PM: 11.2% and 4.4%. ZN: 7.8% and 1.7%	10
Ejeh et al. (2014b)	2012	PS	Benue	U	cattle	PM, CI and Mol	Yes	Yes	20/249	8.00%	No	No	6
Ahmad et al. (2018)	2014	PS	Zamfara	rainy	cattle	ZN and Mol	No	Yes	37/226 and 34/37	16.4% and 91.9%	ZN: 12.83% and 3.54%. Mol: 72.97% and 18.92%	ZN: 14.16% and 2.21%. Mol: 78.38% and 13.51%	9
Musawa et al. (2013)	U	PS	Sokoto	U	cattle	LF	No	No	8/194	4.12%	6.93% and 1.08%	4.3% and 0%	9
Bala et al. (2011)	2000 - 2009	PS	Borno	U	cattle, sheep, goats and camels	PM	No	No	6368/403560, 1423/373567, 986/38160 and 732/219308	1.6%, 0.4%, 0.3% and 0.3%	No	No	7
Adesokan et al. (2019b)	2014 - 2015	PS	Ogun, Ebonyi and Sokoto	U	cattle	PM, CI and Mol	Yes	Yes	86/574, 7/396 and 9/602	14.9%, 1.8% and 1.5%	No	No	6
Adang et al. (2015)	2009	PS	Gombe	rainy	cattle	PM	No	No	85/320	26.60%	62.4% and 11.9%	UC	9
Lawan et al. (2020b)	2017	PS	Borno	rainy	camels	PM, ZN, CI and Mol	Yes	Yes	PM(20/123), ZN(10/123) and CI(12/20)	16.26%, 8.13% and 60%	PM: 20.59% and 10.91%. ZN: 11.76% and 3.64%. CI: 57.14% and 66.67%	PM: 17.07% and 14.63%. ZN: 8.54% and 7.32%. CI: 71.43% and 33.33%	9

Adamu et al. (2021)	2015 - 2019	PS	Abuja	U	cattle	PM	No	No	1704/227,395	0.75%	No	No	8
Ameen et al. (2008)	2004- 2005	PS	Oyo	U	cattle	PM and ZN	No	No	PM and ZN: 97/17676	0.50%	PM: 0.62% and 0.54%. ZN: 0.57% and 0.54%	No	8
Hena et al. (2012)	U	PS	Zamfara	U	cattle, sheep and goats	PM	No	No	28/592, 9/910 and 12/894	4.73%, 0.99% and 1.34%	No	No	6
Tinau et al. (2020)	U	PS	Kaduna	U	cattle	SICTT	No	No	23/239	9.60%	7.9% and 1.67%	No	8
Aliyu et al. (2009)	2000-2004	PS	Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe	U	cattle	PM	No	No	12,259/302,700	0.34%, 0.88%, 1.72%, 12.27%, 4.98% and 4.13%	No	No	6
Bikom and Oboegbulem (2007)	2002 - 2003	PS	Cross River	U	cattle	PM and ZN	No	No	151/990 and 120/8990	1.6% and 1.3%	PM: 1.93% and 1.43%. ZN: 1.6% and 1.1%	No	8
Opara (2005)	1999 - 2002	PS	Akwa Ibom	U	cattle	PM	No	No	183/5,369	3.40%	No	No	6
Chukwu et al. (2013)	2010	PS	Plateau	rainy	cattle	ZN and Mol	No	Yes	15/50 and 9/50	30% and 18%	No	No	7
Nwanta et al. (2011)	2004 - 2008	PS	Enugu	U	cattle	PM	No	No	748/53,365	1.40%	6.9% and 0.6%	No	8
Cadmus et al. (2004)	U	PS	Oyo	U	cattle	SCITT, ZN, CI and Mol	No	Yes	SCITT: 18/171	SCITT: 10.5%	9.9% and 0.6%	No	7
Adah et al. (1992)	U	PS	Borno	U	cattle	SCITT	No	No	104	2.88%	No	No	5
Ejeh et al. (2014c)	U	PS	Benue	U	cattle	PM and ZN	No	No	20/248 and 16/248	8.1% and 6.5%	PM: 10.7% and 4.6%. ZN: 8.6% and 3.7%	PM: 8.8% and 0%. ZN: 7.1% and 0%	9
Danbimi et al. (2015)	U	PS	Adamawa	U	cattle	SITT	No	No	236/2,810	8.40%	No	No	6
Igbokwe et al. (2001)	1994 - 1998	PS	Borno	U	cattle	PM	No	No	47544/1698000	2.80%	No	No	5
Ibrahim et al. (2016a)	2011 - 2013	PS	Gombe	U	cattle	SITT, ZN and CI	Yes	Yes	311/2245, 62/200 and 25/200	13.85%, 32.5% and 12.5%	SITT: 15.67% and 9.0%	No	9
Opara et al. (2012)	U	PS	Imo	U	cattle	PM	No	No	247/7,164	3.40%	4.5% and 3.3%	No	6
Oragwa et al. (2017)	2006 - 2012	PS	Plateau	U	cattle, sheep and goats	PM	No	No	5504/64091, 74/72004 and 148/121458	8.59%, 0.1% and 0.12%	No	No	6
Kachalla et al. (2016)	U	PS	Abuja	U	cattle	LF	No	No	32/185	17.30%	29.2% and 13.1%	No	8
Kwaghe et al. (2015)	2013	PS	Borno	rainy	cattle	PM	No	No	160/2495	6.41%	8.08% and 1.02%	No	8
Alaku and Moruppa (1993)	1981 - 1990	PS	Borno	U	cattle, sheep and goats	PM	No	No	15926/376500, 405/183848, 175/438177	cattle (4.23%), sheep (0.22%) and goats (0.04%)	No	No	5
Ahmad et al. (2019a)	2016	PS	Zamfara	rainy	camels	PM	No	No	71/212	33.50%	24.3% and 35.4%	U	9

Tijani et al. (2020)	U	CR	U	U	cattle (bull)	PM, ZN, Hist, CI and Mol	Yes	Yes	NA	NA	NA	NA	5
Ahmad et al. (2019b)	2017	CR	Zamfara	dry	cattle (cow) and camel (bull)	PM, ZN and Mol	No	Yes	NA	NA	NA	NA	5
Cadmus et al. (2008b)	U	CR	Oyo	U	cattle	PM and CI	Yes	No	NA	NA	NA	NA	3
Adeogun et al. (2016)	2009 - 2010	CR	Oyo	U	wildlife (female gorilla and lioness)	PM, Hist, CI, HAT and Mol	Yes	Yes	NA	NA	NA	NA	5
Kalu et al. (2019)	U	CR	Abia	U	cattle (bull)	PM	No	No	NA	NA	NA	NA	3
Ibrahim et al. (2016b)	2010	CR	U	dry	cattle (cow)	SITT, CI, ZN and HAT	Yes	Yes	NA	NA	NA	NA	4
Ahmad et al. (2017b)	2016	CR	Zamfara	rainy	cattle (cows)	PM	No	No	NA	NA	NA	NA	4

PS: prevalence study; CR: case report; U: unclear; NA: not applicable; Maximum quality score obtainable = 10; No: means the variable(s) was/were not recorded in the study; Detection method: a single or combination of techniques used to detect infection in a study; Mycobacterial isolation: detection of tuberculous mycobacteria by culture isolation; MTBC Identification: detection of *Mycobacterium tuberculosis* complex by molecular techniques; PM: postmortem examination; ZN: Ziehl-Neelsen (ZN) staining; Mol: single or various molecular methods used for detection of MTBC; SITT: single intradermal tuberculin test; CI: culture isolation; LF: lateral flow test; SCITT: single comparative intradermal tuberculin test; Hist: histopathological examination; HAT: Hain Assay Test (GenoType MTBC analysis).

S2 Table. Quality assessment of studies that meet the eligibility criteria using critical appraisal instrument addressing questions on prevalence developed by Munn et al. (2014)

S/N	Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total Score				
												Y	N	U	NA	%
1	Okeke et al., 2016	Y	Y	NA	Y	Y	U	Y	N	N	N	5	3	1	1	55.5
2	Ibrahim et al., 2012	Y	Y	N	Y	Y	Y	Y	N	Y	Y	8	2	0	0	80.0
3	Damina et al., 2011b	Y	Y	NA	Y	Y	Y	Y	N	Y	Y	8	1	0	1	88.9
4	Alonge and Fasanmi, 1979	Y	Y	NA	Y	Y	Y	Y	N	N	N	6	3	0	1	66.7
5	Jajere et al., 2018	Y	Y	NA	Y	Y	Y	Y	N	Y	Y	8	1	0	1	88.9
6	Sa'idu et al., 2015	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	9	1	0	0	90.0
7	Ibrahim et al., 2018	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
8	Oyekunle and Talabi 2013	Y	U	N	N	Y	Y	U	Y	Y	Y	6	2	2	0	60.0
9	Cadmus et al., 2008	Y	Y	N	Y	Y	Y	Y	N	Y	Y	8	2	0	0	80.0
10	Agbalaya et al., 2020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
11	Jajere et al., 2018b	Y	Y	NA	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
12	Cadmus et al., 2006	Y	Y	N	Y	Y	Y	Y	N	N	N	6	4	0	0	60.0
13	Ejeh et al., 2013	Y	Y	NA	Y	Y	Y	Y	Y	Y	Y	9	0	0	1	100
14	Ahmad et al., 2017	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
15	Yohana et al., 2008	Y	Y	N	Y	Y	Y	Y	N	Y	Y	8	2	0	0	80.0
16	Abubakar et al., 2013	Y	Y	U	Y	Y	Y	Y	N	Y	Y	8	1	1	0	80.0

17	Cadmus et al., 2010	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	9	0	1	0	90.0
18	Cadmus and Arinola 2007	Y	Y	U	Y	Y	Y	Y	Y	N	N	7	2	1	0	70.0
19	Bikom et al., 2021	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
20	Ibrahim et al., 2010	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	9	0	1	0	90.0
21	Makeri et al., 2018	Y	Y	U	Y	Y	Y	Y	N	Y	Y	8	1	1	0	80.0
22	Oluwasile et al., 2013	Y	Y	NA	Y	Y	Y	Y	Y	Y	Y	9	0	0	1	100
23	Adesokan et al., 2019a	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
24	Akinseye et al., 2018	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	9	0	1	0	90.0
25	Ejeh et al., 2014b	Y	Y	NA	Y	Y	Y	Y	Y	N	N	7	2	0	1	77.8
26	Atuman et al., 2018	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	9	0	1	0	90.0
27	Ogugua et al., 2021	Y	Y	N	Y	Y	Y	Y	N	Y	Y	8	2	0	0	80.0
28	Sa'idu et al., 2017	Y	Y	N	Y	Y	Y	Y	N	N	N	6	4	0	0	60.0
29	Akinbobola 2017	Y	Y	NA	N	Y	Y	Y	Y	Y	Y	8	1	0	1	88.9
30	Danbirni et al., 2016	Y	Y	NA	Y	Y	Y	Y	N	N	N	6	3	0	1	66.7
31	Okoro et al., 2014	Y	Y	Y	Y	Y	Y	Y	N	N	N	7	3	0	0	70.0
32	Lawan et al., 2020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
33	Ejeh et al., 2014a	Y	Y	N	N	N	Y	Y	N	N	N	4	6	0	0	40.0
34	Ahmad et al., 2018	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	9	0	1	0	90.0

35	Musawa et al., 2013	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	9	1	0	0	90.0
36	Bala et al., 2011	Y	Y	NA	Y	Y	Y	Y	Y	N	Y	Y	8	1	0	1	88.9
37	Adesokan et al., 2019b	Y	Y	N	Y	Y	Y	Y	Y	N	N	N	6	4	0	0	60.0
38	Adang et al., 2015	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	9	1	0	0	90.0
39	Lawan et al 2020b	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	8	2	0	0	80.0
40	Adamu et al., 2021	Y	Y	NA	Y	Y	Y	Y	Y	N	Y	Y	8	1	0	1	88.9
41	Ameen et al., 2008	Y	Y	NA	Y	Y	Y	Y	Y	N	N	Y	7	2	0	1	77.8
42	Hena et al., 2012	Y	Y	N	Y	Y	Y	Y	Y	N	N	N	6	4	0	0	60.0
43	Tinau et al., 2020	Y	Y	U	Y	Y	Y	Y	Y	N	Y	Y	8	1	1	0	80.0
44	Aliyu et al., 2009	Y	Y	NA	Y	Y	Y	Y	Y	N	N	N	7	2	0	1	77.8
45	Bikom and Oboegbulem 2007	Y	Y	NA	Y	Y	Y	Y	Y	N	Y	Y	8	1	0	1	88.9
46	Opara 2005	Y	Y	NA	Y	Y	Y	Y	Y	N	N	N	6	3	0	1	66.7
47	Chukwu et al., 2013	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	7	3	0	0	70.0
48	Nwanta et al., 2011	Y	Y	NA	Y	Y	Y	Y	Y	N	Y	Y	8	1	0	1	88.9
49	Cadmus et al., 2004	Y	Y	NA	Y	Y	Y	Y	Y	N	Y	Y	8	1	0	1	88.9
50	Adah et al., 1992	Y	Y	NA	Y	Y	Y	Y	Y	N	N	N	6	3	0	1	66.7
51	Ejeh et al., 2014a	Y	Y	NA	Y	Y	Y	Y	Y	Y	N	N	7	2	0	1	77.8
52	Danbirni et al., 2015	Y	Y	U	Y	Y	Y	Y	Y	N	N	N	6	3	1	0	60.0

53	Igbokwe et al., 2001	Y	Y	NA	Y	Y	Y	Y	N	N	N	6	3	0	1	66.7
54	Ibrahim et al., 2016	Y	Y	U	Y	Y	Y	Y	N	Y	Y	8	1	1	0	80.0
55	Okeke et al., 2014	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
56	Opara et al., 2012	Y	Y	NA	Y	Y	Y	Y	N	N	Y	7	2	0	1	77.8
57	Oragwa et al., 2017	Y	Y	NA	Y	Y	Y	Y	N	N	N	6	3	0	1	66.7
58	Kachalla et al., 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0	0	0	100
59	Kwaghe et al., 2015	Y	Y	NA	Y	Y	Y	Y	N	Y	Y	8	1	0	1	88.9
60	Alaku and Moruppa 1993	Y	Y	NA	Y	Y	Y	Y	N	N	N	6	3	0	1	66.7
61	Ahmad et al., 2019a	Y	Y	NA	Y	Y	Y	Y	Y	Y	Y	9	0	0	1	100

Q: question; Y: Yes; N: no; U: unclear; NA: not applicable

S3 Table. Quality assessment of studies that meet the eligibility criteria using critical appraisal checklist on case reports by Murad et al. (2018)

S/N	Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total Score				%
										Y	N	U	NA	
1	Tijani et al., 2020	Y	Y	Y	Y	NA	NA	NA	Y	5	0	0	3	100
2	Ahmad et al., 2019b	Y	Y	Y	Y	NA	NA	NA	Y	5	0	0	3	100
3	Cadmus et al., 2008b	Y	Y	Y	N	NA	NA	NA	N	3	2	0	3	60.0
4	Adeogun et al., 2016	Y	Y	Y	Y	NA	NA	NA	Y	5	0	0	3	100
5	Kalu et al., 2019	Y	Y	N	N	NA	NA	NA	Y	3	2	0	3	60.0
6	Ibrahim et al., 2016b	Y	Y	NA	Y	NA	NA	NA	Y	4	0	0	4	100
7	Ahmad et al., 2017b	Y	Y	Y	N	NA	NA	NA	Y	4	1	0	3	80.0

Q: question; Y: Yes; N: no; U: unclear; NA: not applicable

S4 Table. List of prevalence studies selected for meta-analysis

Author	Title	Journal where the manuscript was published
Okeke et al., 2016	Bovine tuberculosis: a retrospective study at Jos abattoir, Plateau state, Nigeria	<i>The Pan African Medical Journal</i>
Ibrahim et al., 2012	Tuberculosis in humans and cattle in Jigawa state, Nigeria: risk factors analysis.	<i>Veterinary Medicine International</i>
Damina et al., 2011b	The use of Deletion Analysis in the Detection of <i>Mycobacterium bovis</i> , <i>Mycobacterium tuberculosis</i> and <i>Mycobacterium africanum</i> among Slaughtered Cattle in Plateau State, North Central Nigeria.	<i>Nigerian Veterinary Journal</i>
Alonge and Fasanmi, 1979	A survey of abattoir data in northern Nigeria.	<i>Tropical Animal Health and Production</i>
Jajere et al., 2018	Occurrence of bovine tuberculosis among cattle herds from nomadic peri-urban settlements and cattle slaughtered at the municipal abattoir of Bauchi, North-Eastern Nigeria.	<i>Journal of Advanced Veterinary and Animal Research</i>
Sa'idu et al., 2015	Detection of <i>Mycobacterium bovis</i> in organs of slaughtered cattle by DNA-based polymerase chain reaction and Ziehl-Neelsen techniques in Bauchi State Nigeria.	<i>Journal of Veterinary Medicine</i>
Ibrahim et al., 2018	Preliminary field survey on <i>Mycobacterium bovis</i> infection in cattle herds using caudal fold intradermal tuberculin test in two Northeastern States of Nigeria.	<i>International Journal of One Health</i>
Oyekunle and Talabi 2013	Prevalence of <i>Mycobacterium bovis</i> in some cattle breeds in the aids era: An abattoir survey in Ogun State, Nigeria.	<i>Nigerian Journal of Animal Production</i>
Cadmus et al., 2008	Zoonotic risks and transmission of Mycobacteria species from cows\'milk and slaughtered cattle to man in Ibadan: Role of butchers.	<i>Nigerian Veterinary Journal</i>
Agbalaya et al., 2020	Prevalence of bovine tuberculosis in slaughtered cattle and factors associated with risk of disease transmission among cattle handlers at Oko-Oba Abattoir, Lagos, Nigeria.	<i>Veterinary World</i>

Jajere et al., 2018b	A retrospective study of bovine tuberculosis at the municipal abattoir of Bauchi State, Northeastern Nigeria.	<i>Veterinary World</i>
Cadmus et al., 2006	Molecular analysis of human and bovine tubercle bacilli from a local setting in Nigeria.	<i>Journal of Clinical Microbiology</i>
Ejeh et al., 2013	Seasonal prevalence of Bovine Tuberculous lesions in cattle slaughtered in Yola abattoirs.	<i>Bangladesh Journal of Veterinary Medicine</i>
Ahmad et al., 2017	Occurrence and distribution of bovine TB pathology by age, sex, and breed of cattle slaughtered in Gusau Abattoir, Zamfara State Nigeria.	<i>Tropical Animal Health and Production</i>
Yohana et al., 2008	Prevalence of Bovine tuberculosis using single comparative intradermal tuberculin test (SCITT) in Fulani herds in Nasarawa State, North Central Nigeria.	<i>Sokoto Journal of Veterinary Sciences</i>
Abubakar et al., 2013	Tuberculin screening of some selected Fulani lactating cows in North-Central Nigeria.	<i>Tropical Animal Health and Production</i>
Cadmus et al., 2010	Risk factors associated with bovine tuberculosis in some selected herds in Nigeria.	<i>Tropical animal health and production</i>
Cadmus and Arinola 2007	Reduced plasma levels of essential trace elements in Mycobacterium bovis infected cattle in Nigeria.	<i>African Journal of Biomedical Research</i>
Bikom et al., 2021	Prevalence and distribution of bovine tuberculosis among slaughtered cattle in Cross River State, Nigeria.	<i>Animal Research International</i>
Ibrahim et al., 2010	Prevalence of bovine tuberculosis in Jigawa State, northwestern Nigeria.	<i>Tropical animal health and production</i>
Makeri et al., 2018	Seroprevalence of <i>Mycobacterium bovis</i> in cattle and wildlife in Yankari game reserve, Bauchi State, Nigeria.	<i>Sokoto Journal of Veterinary Sciences</i>

Oluwasile et al., 2013	Prevalence and economic loss of bovine tuberculosis in a municipal abattoir, Abeokuta Southwestern Nigeria.	<i>Nigerian Journal of Animal Production</i>
Adesokan et al., 2019a	Reverse zoonotic tuberculosis transmission from an emerging Uganda I strain between pastoralists and cattle in South-Eastern Nigeria.	<i>BMC veterinary research</i>
Akinseye et al., 2018	Prevalence and risk factors of mycobacterial infections in farm and trade cattle in southwestern Nigeria.	<i>Tropical Animal Health and Production</i>
Ejeh et al., 2014b	Prevalence and direct economic losses from bovine tuberculosis in Makurdi, Nigeria.	<i>Veterinary Medicine International</i>
Atuman et al., 2018	Seroprevalence of bovine tuberculosis and brucellosis in Agropastoralist livestock herds and wildlife in Yankari game reserve: Public health implications.	<i>Sokoto Journal of Veterinary Sciences</i>
Ogugua et al., 2021	Tubercles in cattle carcasses and risk behaviours for zoonotic tuberculosis transmission among workers in a municipal slaughterhouse.	<i>Notulae Scientia Biologicae</i>
Sa'idu et al., 2017	Retrospective study of bovine tuberculosis in Gombe township abattoir, Northeastern Nigeria.	<i>International Journal of Veterinary Science and Medicine</i>
Akinbobola 2017	Bovine tuberculosis: a 3-year retrospective study on incidence and economic implication of gross pathologic condemnations at Karu abattoir, Abuja, Nigeria.	<i>International Journal of Veterinary Science</i>
Danbirni et al., 2016	Prevalence of tuberculosis-like lesions in goats slaughtered at Bauchi central abattoir, Bauchi State.	<i>Sokoto Journal of Veterinary Sciences</i>
Okoro et al., 2014	Comparative assessment of postmortem inspection and immunochromatographic techniques for the detection of bovine tuberculosis in slaughter cattle in Nigeria.	<i>Tropical Animal Health and Production</i>
Lawan et al., 2020	Prevalence of Tuberculosis in Cattle Slaughtered at Maiduguri Central Abattoir, Nigeria.	<i>Sahel Journal of Veterinary Sciences</i>

Ejeh et al., 2014a	Molecular characterization of <i>Mycobacterium bovis</i> in slaughtered cattle in North-Central Nigeria and the public health implications.	<i>Afr. J. Med. Med. Sci</i>
Ahmad et al., 2018	Survey of bovine tuberculosis in Nigerian beef cattle.	<i>Open Veterinary Journal</i>
Musawa et al., 2013	Prevalence of <i>Mycobacterium bovis</i> in Cattle Slaughtered at Sokoto Central Abattoir.	<i>Bulletin of Animal Health and Production in Africa</i>
Bala et al., 2011	Bacterial and parasitic zoonoses encountered at slaughter in Maiduguri abattoir, Northeastern Nigeria.	<i>Veterinary World</i>
Adesokan et al., 2019b	Genetic diversity of <i>Mycobacterium tuberculosis</i> complex strains isolated from livestock workers and cattle in Nigeria.	<i>PLoS One</i>
Adang et al., 2015	Prevalence of bovine tuberculosis in cattle slaughtered at Gombe township abattoir, Gombe State, Nigeria.	<i>Journal of Veterinary Medicine and Animal Health</i>
Lawan et al 2020b	Molecular characterization of <i>Mycobacterium bovis</i> isolated from camels slaughtered for human consumption in Northeastern Nigeria and the public health implication.	<i>PAMJ-One Health</i>
Adamu et al., 2021	Prevalence of bovine tuberculosis lesions in cattle slaughtered in the Federal Capital Territory Abattoirs, Nigeria-A short communication.	<i>Makerere University Journal of Agricultural and Environmental Sciences</i>
Ameen et al., 2008	Current status of bovine tuberculosis in Ogbomoso area of Oyo state.	<i>Middle-East Journal of Scientific Research</i>
Hena et al., 2012	A tentative case of tuberculosis detected at postmortem examination of animal carcasses slaughtered at some local slaughter slabs in north-western Nigeria.	<i>Scientific Journal of Agriculture</i>
Tinau et al., 2020	Occurrence of <i>Mycobacterium bovis</i> infection in cattle in Kaduna metropolis and its environs.	<i>Nigerian Journal of Animal Production</i>
Aliyu et al., 2009	Current prevalence of tuberculous lesions among slaughtered cattle in Northeastern States of Nigeria	<i>Revue d'élevage et de Médecine vétérinaire des Pays tropicaux</i>

Bikom and Oboegbulem 2007	Prevalence of suspected tuberculous lesions in cattle slaughtered in Cross River State Abattoirs.	<i>Nigerian Journal of Animal Production</i>
Opara 2005	Pathological conditions of condemned bovine lungs from abattoirs in Akwa Ibom State, Nigeria.	<i>Animal Research International</i>
Chukwu et al., 2013	Detection of <i>Mycobacterium tuberculosis</i> complex in lung specimen of slaughtered cattle and goats by a DNA based multiplex polymerase chain reaction and Ziehl-Neelsen methods in Jos, Nigeria.	<i>Microbiology Research Journal International</i>
Nwanta et al., 2011	Retrospective study of bovine and human tuberculosis in abattoirs and hospitals in Enugu State, Southeast Nigeria.	<i>Journal of Public Health and Epidemiology</i>
Cadmus et al., 2004	Bovine tuberculosis in one cattle herd in Ibadan in Nigeria.	<i>Veterinari Medicina</i>
Adah et al., 1992	Prevalence of Tuberculin Reactor Cattle in the University of Maiduguri Livestock Farm	<i>Zariya Veterinarian</i>
Ejeh et al., 2014a	Current status of bovine tuberculosis in Otukpo, Nigeria	<i>Journal of Production Advances</i>
Danbirni et al., 2015	Prevalence of Mycobactrium Bovis Infection in Cattle Based on Intra-Dermal Caudal Fold Tuberculin Test in Adamawa State, Nigeria	<i>Journal of Veterinary Advances</i>
Igbokwe et al., 2001	Prevalence of pulmonary tuberculous lesions in cattle slaughtered in abattoirs in Northeastern Nigeria	<i>Revue d'élevage et de Médecine vétérinaire des Pays tropicaux</i>
Ibrahim et al., 2016	Preliminary study on the prevalence of bovine tuberculosis and risk factors among pastoralists in Gombe State, North Eastern Nigeria	<i>Journal of Microbiology and Experimentation</i>
Okeke et al., 2014a	Prevalence and risk factors of <i>Mycobacterium tuberculosis</i> complex infection in slaughtered cattle at Jos South Abattoir, Plateau State, Nigeri	<i>The Pan African Medical Journal</i>
Opara et al., 2012	Prevalence of bovine tuberculosis (BTB) in Imo State, southeastern Nigeria	<i>J. Trop. Med. Parasitol</i>

Oragwa et al., 2017	Prevalence of Tuberculosis among Livestock Slaughtered for Human Consumption: A Jos Abattoir Based Study	<i>International Journal of Life Sciences</i>
Kachalla et al., 2016	The Use of Lateral Flow Technique (Rapid Kit Test) in the Determination of Prevalence of Bovine Tuberculosis	<i>International Journal of Life Sciences</i>
Kwaghe et al., 2015	Prevalence and economic losses from bovine tuberculosis in Maiduguri, Borno State, Nigeria	<i>International Journal of Life Sciences</i>
Alaku and Moruppa 1993	Tuberculosis condemnations in livestock slaughtered for meat in northeastern Nigeria.	<i>Preventive Veterinary Medicine</i>
Ahmad et al., 2019a	Tuberculosis in dromedary camels slaughtered in Nigeria: a documentation of lesions at postmortem.	<i>Tropical animal health and production</i>

S5 Table. List of case report studies included for synthesis review

Author	Title	Journal published
Tijani et al., 2020	<i>Mycobacterium bovis</i> in a bull on a university farm: public health implications.	<i>The Pan African Medical Journal</i>
Ahmad et al., 2019	Disseminated tuberculosis in a cow and a dromedary bull-camel in Zamfara State in Nigeria.	<i>Veterinary Medicine and Science</i>
Cadmus et al., 2008b	Co-infection of brucellosis and tuberculosis in slaughtered cattle in Ibadan, Nigeria: a case report.	<i>Veterinaria Italiana</i>
Adeogun et al., 2016	<i>Mycobacterium tuberculosis</i> and Dual <i>M. tuberculosis/M. bovis</i> Infection as the Cause of Tuberculosis in a Gorilla and a Lioness, Respectively, in Ibadan Zoo, Nigeria.	<i>Case reports in veterinary medicine</i>
Kalu et al., 2019	A Case of Generalized Bovine Tuberculosis in a Slaughter Slab	<i>Global Veterinaria</i>
Ibrahim et al., 2016b	Molecular identification of <i>Mycobacterium tuberculosis</i> transmission between cattle and man: a case report	<i>Journal of Microbiology and Experimentation</i>
Ahmad et al., 2017a	Detection of Mammary Tuberculosis in Slaughtered Cattle and Consequent Risk of Zoonosis to Human in Nigeria	<i>Alexandria Journal of Veterinary Sciences</i>

S6 Table. List of articles that provided the prevalence data for meta-analysis

Species	Author	Title of the article
cattle	Ahmad, 2018	Survey of bovine tuberculosis in Nigerian beef cattle
	Saidu, 2015	Occurrence and Distribution of bovine tuberculosis (<i>Mycobacterium bovis</i>) in Slaughtered cattle in the abattoirs of Bauchi State, Nigeria
	Okeke, 2016	Bovine tuberculosis: a retrospective study at Jos abattoir, Plateau State, Nigeria
	Ibrahim, 2012	Tuberculosis in humans and cattle in Jigawa state, Nigeria: risk factors analysis
	Damina, 2011	The use of Deletion Analysis in the Detection of <i>Mycobacterium bovis</i> , <i>Mycobacterium tuberculosis</i> and <i>Mycobacterium africanum</i> among Slaughtered Cattle in Plateau State, North Central Nigeria
	Alonge, 1979	A survey of abattoir data in northern Nigeria
	Jajere, 2018	Occurrence of bovine tuberculosis among cattle herds from nomadic peri-urban settlements and cattle slaughtered at the municipal abattoir of Bauchi, North-Eastern Nigeria
	Ibrahim, 2018	Preliminary field survey on <i>Mycobacterium bovis</i> infection in cattle herds using caudal fold intradermal tuberculin test in two Northeastern States of Nigeria
	Oyekunle, 2013	Prevalence of <i>Mycobacterium bovis</i> in some cattle breeds in the aids era: An abattoir survey in Ogun State, Nigeria
	Cadmus, 2008	Zoonotic risks and transmission of <i>Mycobacteria</i> species from cows' milk and slaughtered cattle to man in Ibadan: Role of butchers
	Agbalaya, 2020	Prevalence of bovine tuberculosis in slaughtered cattle and factors associated with risk of disease transmission among cattle handlers at Oko-Oba Abattoir, Lagos, Nigeria
	Jajere, 2018	A retrospective study of bovine tuberculosis at the municipal abattoir of Bauchi State, Northeastern Nigeria
	Cadmus, 2006	Molecular analysis of human and bovine tubercle bacilli from a local setting in Nigeria
	Ejeh, 2013	Seasonal prevalence of Bovine Tuberculous lesions in cattle slaughtered in Yola abattoirs
	Ahmad, 2017	Occurrence and distribution of bovine TB pathology by age, sex, and breed of cattle slaughtered in Gusau Abattoir, Zamfara State Nigeria
	Yohanna, 2008	Prevalence of Bovine tuberculosis using single comparative intradermal tubeculin test (SCITT) in Fulani herds in Nasarawa State, North Central Nigeria
	Abubakar, 2013	Tuberculin screening of some selected Fulani lactating cows in North-Central Nigeria
	Cadmus, 2010	Risk factors associated with bovine tuberculosis in some selected herds in Nigeria
	Cadmus, 2007	Reduced plasma levels of essential trace elements in <i>Mycobacterium bovis</i> infected cattle in Nigeria
	Bikom, 2021	Prevalence and distribution of bovine tuberculosis among slaughtered cattle in Cross River State, Nigeria
	Ibrahim, 2010	Prevalence of bovine tuberculosis in Jigawa State, northwestern Nigeria

	Makeri, 2018	Seroprevalence of <i>Mycobacterium bovis</i> in cattle and wildlife in Yankari game reserve, Bauchi State, Nigeria
	Oluwasile, 2013	Prevalence and economic loss of bovine tuberculosis in a municipal abattoir, Abeokuta Southwestern Nigeria
	Adesokan, 2019	Reverse zoonotic tuberculosis transmission from an emerging Uganda I strain between pastoralists and cattle in South-Eastern Nigeria
	Akinseye, 2018	Prevalence and risk factors of mycobacterial infections in farm and trade cattle in southwestern Nigeria
	Okeke, 2014	Prevalence and risk factors of <i>Mycobacterium tuberculosis</i> complex infection in slaughtered cattle at Jos South Abattoir, Plateau State, Nigeria
	Ejeh, 2014	Prevalence and direct economic losses from bovine tuberculosis in Makurdi, Nigeria
	Atuman, 2018	Seroprevalence of bovine tuberculosis and brucellosis in Agropastoralist livestock herds and wildlife in Yankari game reserve: Public health implications
	Ogugua, 2021	Tubercles in cattle carcasses and risk behaviours for zoonotic tuberculosis transmission among workers in a municipal slaughterhouse
	Sa'idu, 2017	Retrospective study of bovine tuberculosis in Gombe township abattoir, Northeastern Nigeria
	Akinbobola, 2017	Bovine tuberculosis: a 3-year retrospective study on incidence and economic implication of gross pathologic condemnations at Karu abattoir, Abuja, Nigeria
	Okoro, 2014	Comparative assessment of postmortem inspection and immunochromatographic techniques for the detection of bovine tuberculosis in slaughter cattle in Nigeria
	Lawan, 2020	Prevalence of Tuberculosis in Cattle Slaughtered at Maiduguri Central Abattoir, Nigeria
	Ejeh, 2014	Molecular characterization of <i>Mycobacterium bovis</i> in slaughtered cattle in North-Central Nigeria and the public health implications
	Musawa, 2013	Prevalence of <i>Mycobacterium bovis</i> in Cattle Slaughtered at Sokoto Central Abattoir
	Bala, 2011	Bacterial and parasitic zoonoses encountered at slaughter in Maiduguri abattoir, Northeastern Nigeria
	Adesokan, 2019	Genetic diversity of <i>Mycobacterium tuberculosis</i> complex strains isolated from livestock workers and cattle in Nigeria
	Adang, 2015	Prevalence of bovine tuberculosis in cattle slaughtered at Gombe township abattoir, Gombe State, Nigeria
	Adamu, 2021	Prevalence of bovine tuberculosis lesions in cattle slaughtered in the Federal Capital Territory Abattoirs, Nigeria-A short communication
	Ameen, 2008	Current status of bovine tuberculosis in Ogbomoso area of Oyo state
	Hena, 2012	A tentative case of tuberculosis detected at postmortem examination of animal carcasses slaughtered at some local slaughter slabs in north-western Nigeria
	Tinau, 2020	Occurrence of <i>Mycobacterium bovis</i> infection in cattle in Kaduna metropolis and its environs
	Aliyu, 2009	Current prevalence of tuberculous lesions among slaughtered cattle in Northeastern States of Nigeria

	Bikom, 2007	Prevalence of suspected tuberculous lesions in cattle slaughtered in Cross River State Abattoirs
	Opara, 2005	Pathological conditions of condemned bovine lungs from abattoirs in Akwa Ibom State, Nigeria
	Chukwu, 2013	Detection of <i>Mycobacterium tuberculosis</i> complex in lung specimen of slaughtered cattle and goats by a DNA based multiplex polymerase chain reaction and Ziehl-Neelsen methods in Jos, Nigeria
	Nwanta, 2011	Retrospective study of bovine and human tuberculosis in abattoirs and hospitals in Enugu State, Southeast Nigeria
	Cadmus, 2004	Bovine tuberculosis in one cattle herd in Ibadan in Nigeria
	Adah, 1992	Prevalence of Tuberculin Reactor Cattle in the University of Maiduguri Livestock Farm
	Ejeh, 2014	Current status of bovine tuberculosis in Otukpo, Nigeria
	Danbirni, 2015	Prevalence of <i>Mycobacterium bovis</i> Infection in Cattle Based on Intra-Dermal Caudal Fold Tuberculin Test in Adamawa State, Nigeria
	Igbokwe, 2001	Prevalence of pulmonary tuberculous lesions in cattle slaughtered in abattoirs in Northeastern Nigeria
	Ibrahim, 2016	Preliminary study on the prevalence of bovine tuberculosis and risk factors among pastoralists in Gombe State, North Eastern Nigeria
	Opara, 2012	Prevalence of bovine tuberculosis (BTB) in Imo State, southeastern Nigeria
	Oragwa, 2017	Prevalence of Tuberculosis among Livestock Slaughtered for Human Consumption: A Jos Abattoir Based Study
	Kachalla, 2016	The Use of Lateral Flow Technique (Rapid Kit Test) in the Determination of Prevalence of Bovine Tuberculosis (bTB) in Cattle from Two Abattoirs in Abuja, Nigeria
	Kwaghe, 2015	Prevalence and economic losses from bovine tuberculosis in Maiduguri, Borno State, Nigeria
	Alaku, 1993	Tuberculosis condemnations in livestock slaughtered for meat in northeastern Nigeria
goats	Bala, 2011	Bacterial and parasitic zoonoses encountered at slaughter in Maiduguri abattoir, Northeastern Nigeria
	Hena, 2012	A tentative case of tuberculosis detected at postmortem examination of animal carcasses slaughtered at some local slaughter slabs in north-western Nigeria
	Oragwa, 2017	Prevalence of Tuberculosis among Livestock Slaughtered for Human Consumption: A Jos Abattoir Based Study
	Alaku, 1993	Tuberculosis condemnations in livestock slaughtered for meat in northeastern Nigeria
	Danbirni, 2016	Prevalence of tuberculosis-like lesions in goats slaughtered at Bauchi central abattoir, Bauchi State
sheep	Bala, 2011	Bacterial and parasitic zoonoses encountered at slaughter in Maiduguri abattoir, Northeastern Nigeria

	Hena, 2012	A tentative case of tuberculosis detected at postmortem examination of animal carcasses slaughtered at some local slaughter slabs in north-western Nigeria
	Oragwa, 2017	Prevalence of Tuberculosis among Livestock Slaughtered for Human Consumption: A Jos Abattoir Based Study
	Alaku, 1993	Tuberculosis condemnations in livestock slaughtered for meat in northeastern Nigeria
camels	Ahmad, 2019	Tuberculosis in dromedary camels slaughtered in Nigeria: a documentation of lesions at postmortem
	Bala, 2011	Bacterial and parasitic zoonoses encountered at slaughter in Maiduguri abattoir, Northeastern Nigeria
	Lawan, 2020	Molecular characterization of Mycobacterium bovis isolated from camels slaughtered for human consumption in Northeastern Nigeria and the public health implication
wildlife	Makeri, 2018	Seroprevalence of Mycobacterium bovis in cattle and wildlife in Yankari game reserve, Bauchi State, Nigeria
	Atuman, 2018	Seroprevalence of bovine tuberculosis and brucellosis in Agropastoralist livestock herds and wildlife in Yankari game reserve: Public health implications