

Association of apolipoprotein E polymorphisms (E2, E3, E4) with type 2 diabetes: a meta-analysis of case-control studies

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Annex 1: sensitivity test of E3E3 vs E2E2		
Excluded studies	OR global (95%)	I ²
None (all studies)	1.21 [0.78, 1.87]	48%
Eto, 1986	1.20 [0.87, 1.67]	49%
Inamdar, 2000	1.19 [0.86, 1.66]	50%
Liu, 2003	1.19 [0.86, 1.66]	50%
Leiva, 2005	1.19 [0.86, 1.64]	48%
Dixit, 2005	0.86 [0.04, 20.96]	49%
Singh, 200	1.19 [0.86, 1.66]	50%
Guan, 2009	1.15 [0.83, 1.60]	48%
Tascilar, 2009	1.20 [0.86, 1.68]	50%
Mustapic, 2012	1.19 [0.86, 1.66]	50%
Chaudhary, 2012	1.12 [0.83, 1.50]	39%
Khalaf Alharbi, 2014	1.18 [0.80, 1.73]	52%
Srirojnopkun, 2018	1.15 [0.82, 1.61]	49%
Liu, 2019	1.18 [0.85, 1.65]	50%
Tang, 2019	1.21 [0.87, 1.69]	50%
Atageldiyeva, 2019	1.19 [0.86, 1.64]	48%
Rahman, 2019	1.19 [0.86, 1.64]	48%
A. Galal, 2020	1.15 [0.81, 1.64]	49%
Gonzalez-Aldaco, 2020	1.17 [0.84, 1.61]	48%
Wang, 2021	1.37 [0.95, 1.99]	59%
Dlouha, 2021	1.21 [0.85, 1.71]	50%
Liu, 2022	1.30 [0.91, 1.85]	48%
wu, 2022	1.19 [0.85, 1.67]	50%
Zeng, 2023	1.26 [0.82, 1.94]	50%
Gan, 2023	1.16 [0.83, 1.61]	49%
Han, 2023	1.15 [0.82, 1.61]	49%

Annex 2: sensitivity test of E3E3 vs E2E3		
Excluded studies	OR global (95%)	I ²
None (all studies)	1.31 [0.97, 1.76]	87%
Eto, 1986	1.32 [0.97, 1.80]	88%
Inamdar, 2000	1.34 [0.99, 1.82]	88%
Liu, 2003	1.26 [0.93, 1.70]	87%
Leiva, 2005	1.34 [0.98, 1.81]	88%
Dixit, 2005	1.32 [0.97, 1.79]	88%
Singh, 2006	1.34 [0.99, 1.82]	88%
Guan, 2009	1.29 [0.95, 1.75]	87%
Tascilar, 2009	1.32 [0.97, 1.80]	88%
Mustapic, 2012	1.29 [0.95, 1.75]	87%
Chaudhary, 2012	1.14 [0.89, 1.46]	80%
Khalaf Alharbi, 2014	1.30 [0.95, 1.76]	87%
Srirojnopkun, 2018	1.40 [1.04, 1.88]	87%
Liu, 2019	1.36 [1.00, 1.84]	87%
Tang, 2019	1.32 [0.97, 1.80]	88%
Atageldiyeva, 2019	1.37 [1.00, 1.86]	85%
Rahman, 2019	1.28 [0.95, 1.73]	87%
A. Galal, 2020	1.33 [0.98, 1.80]	88%
Gonzalez-Aldaco, 2020	1.25 [0.93, 1.69]	87%
Wang, 2021	1.29 [0.95, 1.75]	87%
Dlouha, 2021	1.35 [0.97, 1.88]	87%
Liu, 2022	1.36 [1.01, 1.85]	87%
wu, 2022	1.32 [0.96, 1.81]	88%
Zeng, 2023	1.34 [0.97, 1.85]	88%
Gan, 2023	1.24 [0.93, 1.66]	86%
Han, 2023	1.31 [0.95, 1.81]	87%



Annex 3: sensitivity test of E3E3 vs E2E4		
Excluded studies	OR global (95%)	I ²
None (all studies)	1.26 [0.94, 1.70]	41%
Eto, 1986	1.28 [0.95, 1.72]	43%
Inamdar, 2000	1.28 [0.94, 1.73]	44%
Liu, 2003	1.29 [0.96, 1.74]	42%
Leiva, 2005	1.28 [0.94, 1.74]	43%
Dixit, 2005	1.27 [0.93, 1.72]	44%
Errera, 2006	1.25 [0.93, 1.68]	42%
Singh, 2006	1.25 [0.93, 1.68]	43%
Erdogan, 2009	1.26 [0.94, 1.70]	41%
Guan, 2009	1.24 [0.92, 1.66]	42%
Tascilar, 2009	1.31 [0.98, 1.76]	40%
Mustapic, 2012	1.25 [0.92, 1.68]	43%
Chaudhary, 2012	1.19 [0.93, 1.52]	21%
Khalaf Alharbi, 2014	1.26 [0.92, 1.73]	44%
I. Atta, 2016	1.17 [0.89, 1.53]	31%
Srirojnopkun, 2018	1.30 [0.96, 1.76]	42%
Liu, 2019	1.26 [0.94, 1.70]	41%
Tang, 2019	1.24 [0.92, 1.66]	42%
Atageldiyeva, 2019	1.30 [0.91, 1.84]	44%
Rahman, 2019	1.27 [0.93, 1.73]	44%
A. Galal, 2020	1.29 [0.95, 1.75]	43%
Gonzalez-Aldaco, 2020	1.27 [0.94, 1.72]	44%
Wang, 2021	1.29 [0.95, 1.75]	43%
Dlouha, 2021	1.30 [0.94, 1.79]	43%
Liu, 2022	1.35 [1.00, 1.80]	35%
wu, 2022	1.28 [0.95, 1.74]	43%
Zeng, 2023	1.30 [0.95, 1.79]	43%
Gan, 2023	1.24 [0.91, 1.69]	43%
Han, 2023	1.20 [0.89, 1.63]	39%
Hameed, 2023	1.25 [0.93, 1.68]	43%



Annex 4: sensitivity test of E3E3 vs E3E4		
Excluded studies	OR global (95%)	I²
None (all studies)	1.23 [1.02, 1.49]	75%
Eto, 1986	1.22 [1.01, 1.49]	76%
Inamdar, 2000	1.23 [1.01, 1.50]	76%
Kalina, 2002	1.27 [1.05, 1.53]	74%
Liu, 2003	1.22 [1.00, 1.48]	76%
Leiva, 2005	1.26 [1.04, 1.52]	75%
Dixit, 2005	1.25 [1.03, 1.51]	76%
Errera, 2006	1.26 [1.04, 1.52]	75%
Singh, 2006	1.26 [1.04, 1.53]	75%
Erdogan, 2009	1.23 [1.02, 1.50]	76%
Guan, 2009	1.22 [1.00, 1.48]	76%
Tascilar, 2009	1.24 [1.02, 1.50]	76%
Mustapic, 2012	1.24 [1.02, 1.51]	76%
Chaudhary, 2012	1.22 [1.01, 1.49]	76%
Khalaf Alharbi, 2014	1.26 [1.04, 1.53]	74%
I. Atta, 2016	1.21 [1.00, 1.47]	76%
Erdogan, 2016	1.27 [1.05, 1.53]	74%
El-Lebedy, 2016	1.23 [1.01, 1.49]	76%
Srirojnopkun, 2018	1.23 [1.00, 1.50]	76%
Liu, 2019	1.22 [1.00, 1.49]	76%
Tang, 2019	1.20 [0.99, 1.46]	75%
Atageldiyeva, 2019	1.18 [1.01, 1.38]	56%
Rahman, 2019	1.23 [1.01, 1.49]	76%
A. Galal, 2020	1.22 [1.01, 1.49]	76%
Gonzalez-Aldaco, 2020	1.25 [1.03, 1.52]	75%
Wang, 2021	1.21 [0.99, 1.47]	76%
Dlouha, 2021	1.21 [0.98, 1.48]	75%
Liu, 2022	1.23 [1.01, 1.50]	76%
wu, 2022	1.22 [1.00, 1.49]	76%
Zeng, 2023	1.22 [0.99, 1.50]	76%
Han, 2023	1.22 [1.00, 1.50]	76%
Hameed, 2023	1.21 [1.00, 1.47]	76%



Annex 5: sensitivity test of E3E3 vs E4E4		
Excluded studies	OR global (95%)	I²
None (all studies)	1.71 [1.05, 2.78]	71%
Eto, 1986	1.78 [1.08, 2.93]	72%
Inamdar, 2000	1.80 [1.08, 2.99]	72%
Liu, 2003	1.78 [1.09, 2.91]	72%
Leiva, 2005	1.71 [1.04, 2.80]	72%
Dixit, 2005	1.71 [1.04, 2.81]	72%
Errera, 2006	1.71 [1.05, 2.78]	71%
Singh, 2006	1.79 [1.10, 2.92]	72%
Guan, 2009	1.76 [1.07, 2.88]	72%
Tascilar, 2009	1.67 [1.01, 2.75]	72%
Mustapic, 2012	1.66 [1.01, 2.72]	72%
Chaudhary, 2012	1.38 [0.96, 1.99]	47%
Khalaf Alharbi, 2014	1.57 [0.97, 2.54]	66%
Srirojnopkun, 2018	1.71 [1.03, 2.83]	72%
Tang, 2019	1.61 [0.99, 2.62]	71%
Atageldiyeva, 2019	1.85 [1.08, 3.16]	67%
Rahman, 2019	1.70 [1.03, 2.79]	72%
A. Galal, 2020	1.62 [0.99, 2.67]	71%
Gonzalez-Aldaco, 2020	1.77 [1.08, 2.89]	72%
Wang, 2021	1.69 [1.03, 2.78]	72%
Dlouha, 2021	1.82 [1.08, 3.08]	72%
Liu, 2022	1.78 [1.04, 3.03]	72%
wu, 2022	1.67 [1.02, 2.73]	72%
Zeng, 2023	1.78 [1.05, 3.01]	72%
Gan, 2023	1.78 [1.08, 2.94]	72%
Han, 2023	1.85 [1.11, 3.06]	71%



Annex 6: sensitivity test of E3 vs E2		
Excluded studies	OR global (95%)	I²
None (all studies)	1.23 [1.00, 1.52]	79%
Eto, 1986	1.23 [0.99, 1.52]	80%
Kalina, 2002	1.25 [1.01, 1.56]	80%
Liu, 2003	1.20 [0.97, 1.48]	79%
Leiva, 2005	1.25 [1.01, 1.55]	80%
Dixit, 2005	1.23 [0.99, 1.52]	80%
Errera, 2006	1.21 [0.98, 1.50]	80%
Singh, 2006	1.24 [1.00, 1.54]	80%
Erdogan, 2009	1.22 [0.99, 1.51]	80%
Guan, 2009	1.20 [0.97, 1.49]	79%
Tascilar, 2009	1.25 [1.01, 1.55]	80%
Mustapic, 2012	1.21 [0.98, 1.50]	79%
Chaudhary, 2012	1.23 [1.00, 1.52]	79%
Khalaf Alharbi, 2014	1.22 [0.98, 1.52]	79%
I. Atta, 2016	1.18 [0.96, 1.45]	78%
Erdogan, 2016	1.26 [1.03, 1.55]	79%
Srirojnopkun, 2018	1.27 [1.02, 1.57]	79%
Liu, 2019	1.26 [1.02, 1.57]	80%
Tang, 2019	1.25 [1.00, 1.55]	80%
Atageldiyeva, 2019	1.27 [1.04, 1.56]	72%
Rahman, 2019	1.22 [0.99, 1.52]	80%
A. Galal, 2020	1.22 [0.98, 1.52]	80%
Gonzalez-Aldaco, 2020	1.19 [0.96, 1.46]	78%
Wang, 2021	1.23 [0.99, 1.53]	80%
Dlouha, 2021	1.23 [1.00, 1.52]	79%
Liu, 2022	1.27 [1.03, 1.57]	79%
wu, 2022	1.24 [0.99, 1.55]	80%
Zeng, 2023	1.25 [1.00, 1.57]	80%
Gan, 2023	1.18 [0.97, 1.44]	75%
Han, 2023	1.24 [0.99, 1.55]	80%
Hameed, 2023	1.22 [0.98, 1.50]	80%

Annex 7: sensitivity test of E3 vs E4		
Excluded studies	OR global (95%)	I ²
None (all studies)	1.26 [1.11, 1.42]	54%
Eto, 1986	1.26 [1.11, 1.44]	55%
Kalina, 2002	1.29 [1.14, 1.46]	48%
Liu, 2003	1.25 [1.10, 1.42]	55%
Leiva, 2005	1.28 [1.13, 1.45]	51%
Dixit, 2005	1.27 [1.11, 1.44]	54%
Errera, 2006	1.27 [1.12, 1.44]	54%
Singh, 2006	1.28 [1.13, 1.44]	50%
Erdogan, 2009	1.26 [1.10, 1.43]	55%
Guan, 2009	1.25 [1.10, 1.42]	55%
Tascilar, 2009	1.26 [1.10, 1.43]	55%
Mustapic, 2012	1.26 [1.11, 1.44]	55%
Chaudhary, 2012	1.25 [1.09, 1.42]	55%
Khalaf Alharbi, 2014	1.24 [1.08, 1.41]	54%
I. Atta, 2016	1.24 [1.09, 1.40]	53%
Erdogan, 2016	1.26 [1.11, 1.43]	55%
Srirojnopkun, 2018	1.25 [1.09, 1.43]	55%
Liu, 2019	1.24 [1.09, 1.42]	55%
Tang, 2019	1.22 [1.08, 1.38]	47%
Atageldiyeva, 2019	1.23 [1.08, 1.41]	51%
Rahman, 2019	1.26 [1.10, 1.43]	55%
A. Galal, 2020	1.23 [1.09, 1.40]	53%
Gonzalez-Aldaco, 2020	1.29 [1.14, 1.46]	49%
Wang, 2021	1.25 [1.10, 1.43]	55%
Liu, 2022	1.25 [1.10, 1.43]	55%
wu, 2022	1.25 [1.09, 1.42]	55%
Zeng, 2023	1.25 [1.09, 1.44]	55%
Gan, 2023	1.27 [1.12, 1.45]	53%
Han, 2023	1.26 [1.10, 1.44]	55%
Hameed, 2023	1.25 [1.10, 1.42]	54%