Evidence Table 167. KQ4—Continuous data—Area under the curve (AUC)

| **Author Year**  **Study Design** | **Definition of outcome** | **CHD Risk Category** | **CVD drug (dose mg/d)** | **Supplement/ Control** | **N** | **Post treatment Mean/**  **(Median)**  **SD/SE**  **Lower limit (IQR, 95% CI)**  **Upper Limit (IQR, 95% CI)** | **Mean change/% change from baseline/**  **SD/**  **P Value** | **Between group differences in Means/ medians**  **SD/**  **P Value** | **Additional comments** | **Overall Risk of Bias (ROB) Assessment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Kim 201035  Cross-over | ng\*h/mL (0 - ∞); measured after single dose of ticlopidine and single dose Ginkgo biloba | Low and/or Moderate | Ticlopidine (250; single dose) | Ginkgo biloba (0.08; single dose) | 24 | Mean: 3466.00  SD: 1548.80 | GMR: 3145.00 | GMRdiff: 1.10  Lower: 1.00  Upper: 1.20 | Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 24 | Mean: 3240.00  SD: 1592.3 | GMR: 2568.00 |
| Tankanow 200365  Cross-over | ng\*h/mL (0 - ∞); Measured after 10 days digoxin or 21 days digoxin + hawthorn | Low (healthy) | Digoxin (0.25) | Hawthorn (0.9) | 8 | Mean: 73.00  SD: 20.00 | - | - | - | Medium |
| No treatment | 8 | Mean: 79.00  SD: 26.00 | - |
| Mauro 200343  Cross-over | ng\*h/mL (0 - ∞); Measured after single-dose administration of digoxin following 7 days pre-treatment with Ginkgo biloba or no pre-treatment | Low (healthy) | Digoxin (0.5; single dose) | *Ginkgo biloba* (0.24) | 8 | Mean: 25.6  SD: 13.2 | - | - | - | Medium |
| No treatment | 8 | Mean: 21.00  SD: 8.6 | - |

| Evidence Table 167. KQ4—Continuous data—Area under the curve (AUC) (continued) | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author Year**  **Study Design** | **Definition of outcome** | **CHD Risk Category** | **CVD drug (dose mg/d)** | **Supplement/ Control** | **N** | **Post treatment Mean/**  **(Median)**  **SD/SE**  **Lower limit (IQR, 95% CI)**  **Upper Limit (IQR, 95% CI)** | **Mean change/% change from baseline/**  **SD/**  **P Value** | **Between group differences in Means/ medians**  **SD/**  **P Value** | **Additional comments** | **Overall Risk of Bias (ROB) Assessment** |
| Jiang 200433  Cross-over | R-Warfarin:  µg/mL\*hr (0 - ∞); measured after single dose warfarin following 1 week pretreatment with ginseng or no pretreatment. Subjects followed for one more week post warfarin dose. | Low (healthy) | Warfarin (25; single dose) | Ginseng (3) | 12 | Mean: 108.1  SD: 18.3  Lower: 95.9  Upper:120.2 | - | GMRdiff: 0.91  Lower: 0.84  Upper: 0.99 | Upper and lower limits of individual group data = 95% CI; Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 12 | Mean: 120.9  SD: 32.9  Lower: 99.0  Upper: 142.7 | - |
| S-Warfarin:  µg/mL\*hr (0 - ∞); measured after single-dose warfarin following 1 wk pretreatment with ginseng or no pretreatment. Subjects followed for 1 wk post warfarin dose. | Low (healthy) | Warfarin (25; single dose) | Ginseng (3) | 12 | Mean: 57.8  SD: 7.4  Lower: 53.1  Upper: 62.5 | *-* | GMRdiff:0.89  Lower: 0.82  Upper: 0.98 | Upper and lower limits of individual group data = 95% CI; Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 12 | Mean: 65.4  SD: 13.8  Lower: 56.6  Upper: 74.1 | *-* |
| Jiang 200532  Cross-over | R-Warfarin:  µg\*h/mL (0 - ∞); measured after single dose warfarin following 1 week pretreatment with Ginger, Ginkgo biloba or no pretreatment. Subjects followed for one more week post warfarin dose. | Low (healthy) | Warfarin (25; single dose) | Ginger (3.6) | 12 | - | - | Ginger  GMRdiff: 1.00  Lower: 0.92  Upper:1.07  Ginkgo biloba  GMRdiff: 0.98  Lower: 0.91  Upper:1.06 | Upper and lower limits of between group difference = 90% CI | Medium |
| Ginkgo biloba(12) | 12 | - | - |
| No treatment | 12 | - | - |
| S-Warfarin:  µg\*h/mL (0 - ∞); measured after single-dose warfarin following 1 wk pretreatment with Ginger, Ginkgo biloba or no pretreatment. Subjects followed for 1 wk post warfarin dose. | Low (healthy) | Warfarin (25; single dose) | Ginger (3.6) | 12 | - | - | Ginger  GMRdiff: 0.95  Lower: 0.89  Upper:1.03  Ginkgo biloba  GMRdiff: 0.97  Lower: 0.89  Upper:1.03 | Upper and lower limits of between group difference = 90% CI | Medium |
| *Ginkgo biloba* (12) | 12 | - | - |
| No treatment | 12 | - | - |
| Hajda 201028  Cross over | ng\*h/mL (0-24 hours) | Low (healthy) | Simvastatin (20) | Garlic extract (600 mg twice daily) | 10 | Mean: 22.1  SD: 25.7 | - | GMR (95% CI): 1.37 (0.88, 2.12) | - | Medium |
| No treatment | 10 | Mean: 11.2  SD: 5.7 | - |
| Hajda 201028  Cross over | ng\*h/mL (0-24 hours) | Low (healthy) | Pravastatin (20) | Garlic extract (600 mg twice daily) | 10 | Mean: 35.4  SD: 15.5 | - | GMR (95% CI): 0.94 (0.65, 1.36) | - | Medium |
| No treatment | 10 | Mean: 41.8  SD: 24.1 | - | - |
| Gosai 200826  Cross-over | ng\*h/ml; 2 weeks treatment; Day 14 steady state | Low (healthy) | Rovustatin (40) | Omega-3 fatty acids (EPA, DHA or both) (4) | 42 | Mean: 231.35  SD: 93.15 | GMR = 213.73 | GMRdiff: 1.05  Lower: 0.99  Upper: 1.10 | % coefficient of variation:  Omega-3: 40.26  Control: 33.18  Intra % coefficient of variation (Omega-3): 14.5  Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 41 | Mean: 215.77  SD: 71.60 | GMR = 204.19 |
| Yuan 200471 | Change from wk1 to w4 (µg/mL/d); steady state: assessed after 3 days warfarin treatment before and after 3 weeks 3 weeks treatment with ginseng or placebo | Low and/or Moderate | Warfarin (5) | Ginseng (2) | 12 | - | Medianchange­: -0.40  Range  L: -1.20  H: 0.20 | Median­diff:  -0.64  Range:  L: -1.25  H: -0.13 | - | Medium |
| Placebo | 8 | - | Medianchange­: 0.18  Range  L: -0.35  H: 1.40 |
| Di Spirito 200819  Cross-over | Atorvastatin; Day 14 steady state (ng\*h/mL) over final dosing interval; 2 weeks treatment | Low (healthy) | Atorvastatin (80) | Omega-3 fatty acids (EPA, DHA or both) (4) | 49 | Mean: 212.50  SD: 46.70 | - | GMRdiff: 1.03  Lower: 0.97  Upper: 1.09 | Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 49 | Mean: 207.20  SD: 45.70 | - |
| 2-hydroxytorvastatin; Day 14 steady state; (ng\*h/mL); 2 weeks treatment | Low (healthy) | Atorvastatin (80) | Omega-3 fatty acids (EPA, DHA or both) (4) | 49 | Mean: 275.00  SD: 37.90 | - | GMRdiff: 0.95  Lower: 0.85  Upper: 1.06 | Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 49 | Mean: 273.02  SD: 35.90 | - |
| Mohammed Abdul 200849  Cross-over | R-Warfarin:  µg/mL\*h (0 - ∞); measured after single dose warfarin following 2 wks pretreatment with garlic or no pretreatment. Subjects followed for one more week post warfarin dose. | Low (healthy) | Warfarin (25; single dose) | Garlic (4; 7.42 mg allicin) | 12 | Mean: 105.00  Lower: 96.30  Upper: 113.70 | - | GMRdiff: 0.99  Lower: 0.87  Upper:1.13 | Upper and lower limits of individual group data = 95% CI; Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 12 | Mean: 108.70  Lower: 90.00  Upper: 127.30 | - |
| S-Warfarin:  µg/mL\*h (0 - ∞); measured after single dose warfarin following 2 wks pretreatment with garlic or no pretreatment. Subjects followed for one more week post warfarin dose | Low (healthy) | Warfarin (25; single dose) | Garlic (4; 7.42 mg allicin) | 12 | Mean: 65.50  Lower: 55.30  Upper: 75.60 | - | GMRdiff: 1.06  Lower: 0.95  Upper:1.19 | Upper and lower limits of individual group data = 95% CI; Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 12 | Mean: 60.30  Lower: 54.50  Upper: 66.10 | - |
| McKenney 200645  Cross-over | Simvastatin; AUCss over final dosing interval (ng\*h/mL); 2 wk treatment. | Low and/or Moderate | Simvastatin (80) | Omega-3 fatty acids (EPA, DHA or both) (4) | 21 | Mean: 125.10  SD: 62.90 | - | - | - | Medium |
| No treatment | 18 | Mean: 116.60  SD: 64.00 | - |
| Beta-hydroxy simvastatin: AUCss over final dosing interval (ng\*h/mL); 2 wk treatment. | Low and/or Moderate | Simvastatin (80) | Omega-3 fatty acids (EPA, DHA or both) (4) | 20 | Mean: 83.00  SD: 42.20 | - | - | - | Medium |
| No treatment | 17 | Mean: 83.90  SD: 44.40 | - |
| Abdul 20101  Cross-over | R-Warfarin:  mg\*h/mL (0 - ∞); measured after single dose warfarin following 2 wks pretreatment with Echinacea or no pretreatment. Subjects followed for one more week post warfarin dose. | Low (healthy) | Warfarin (25; single dose) | *Echinacea* (5.1; 23 mg total alkamides) | 12 | Mean: 74.9  Lower: 62.5  Upper: 87.2 | - | GMRdiff: 0.95  Lower: 0.88  Upper: 1.03 | Upper and lower limits of individual group data = 95% CI; Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 12 | Mean: 79.4  Lower: 65.4  Upper: 93.4 | - |
| S-Warfarin:  mg\*h/mL (0 - ∞); measured after single dose warfarin following 2 wks pretreatment with Echinacea or no pretreatment. Subjects followed for one more week post warfarin dose. | Low (healthy) | Warfarin (25; single dose) | *Echinacea* (5.1; 23 mg total alkamides) | 12 | Mean: 49.0  Lower: 40.0  Upper: 57.9 | - | GMRdiff: 0.92  Lower: 0.85  Upper: 1.99 | Upper and lower limits of individual group data = 95% CI; Upper and lower limits of between group difference = 90% CI | Medium |
| No treatment | 12 | Mean: 53.9  Lower: 42.9  Upper: 64.8 |  |