

**Supplement 5: *H. pylori* included study characteristics.**

Author	Study Design	Population	N	Detection Method
Liu, et al. <sup>56</sup>	Cohort	Taiwan	19680	Urea breath test
Butt, et al. <sup>57</sup>	Case-control	USA	8126	Multiplex serology
Shmuely, et al. <sup>58</sup>	Cross-sectional	Israel	204	IgG ELISA
Selgrad, et al. <sup>59</sup>	Cross-sectional	Germany	253	IgG ELISA
Hsu, et al. <sup>60</sup>	Cohort	Taiwan	30110	Health Data
Nam, et al. <sup>61</sup>	Case-control	South Korea	479	IgG ELISA
Zhang, et al. <sup>62</sup>	Case-control	Germany	3381	IgG ELISA
Abbass, et al. <sup>63</sup>	Cross-sectional	USA	116	Urease/histopathology
Zumkeller, et al. <sup>64</sup>	Case-control	Germany	851	IgG ELISA
Jones, et al. <sup>65</sup>	Case-control	UK	117	Histopathology
Fujimori, et al. <sup>66</sup>	Case-control	Japan	342	Mix for active infection
Siddheshwar, et al. <sup>67</sup>	Case-control	UK	368	IgG ELISA