**Supplementary table 3.** Summary of Google Trends searches and Olmsted County healthcare utilization following publication of *“Rifaximin therapy for patients with irritable bowel syndrome without constipation”* by Pimentel M et al. using three different models.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Model #1** **(models change in both a vertical shift and slope at publication)** | **Model #2** **(models change in slope only at publication)** | **Model #3****(models change in vertical shift only at publication)** |
| **Google****Rifaximin****Searches (RSVa)** | **Intercept Pre****Slope Pre-Pub****Chg Intercept†****Chg Slope‡** **F-testβ** | **27.81(4.16)** **0.16(0.14)****10.61(5.76)****-0.36(0.19)** | **0.26****0.07****0.06****0.02** | **Intercept****Slope Pre-Pub****Chgb Slope** | **24.80(3.87)** **0.33(0.11)****-0.39(0.19)** | **0.003****0.04** | **Intercept****Slope Pre-Pub****Chg Intercept** | **32.84(3.26)****-0.03(0.10)****11.53(5.82)** | **0.72****0.05** |
| **Rifaximin****Prescriptions (Olmsted County)** | **Intercept Pre****Slope Pre-Pub****Chg Intercept****Chg Slope** **F-test** | **1.10(0.38)****-0.002(0.01)****1.31(0.53)****-0.005(0.02)** | **0.90****0.02****0.76****0.046** | **Intercept****Slope Pre-Pub****Chg Slope** |  **0.73(0.36)** **0.02(0.01)****-0.01(0.02)** | **0.06****0.62** | **Intercept****Slope Pre-Pub****Chg Intercept** |  **1.18(0.30)****-0.004(0.01)** **1.33(0.53)** | **0.61****0.01** |
| **Google****IBSc****Searches (RSV)** | **Intercept Pre****Slope Pre-Pub****Chg Intercept****Chg Slope** **F-test** | **83.48(2.17)****-0.24(0.07)****14.31(3.01)** **0.05(0.10)** |  **0.001****<0.0001** **0.59****<0.0001** | **Intercept****Slope Pre-Pub****Chg Slope** | **79.42(2.20)****-0.02(0.06)** **0.02(0.11)** | **0.76****0.89** | **Intercept****Slope Pre-Pub****Chg Intercept** | **82.73(1.68)****-0.22(0.05)****14.18(2.99)** | **<0.0001****<0.0001** |
| **IBS****Visits (Olmsted County)** | **Intercept Pre****Slope Pre-Pub****Chg Intercept****Chg Slope** **F-test** | **22.89(1.60)****-0.001(0.05)** **4.00(2.22)****-0.02(0.07)** | **0.99****0.07****0.76****0.18** | **Intercept****Slope Pre-Pub****Chg Slope** | **21.75(1.49)** **0.06(0.04)****-0.03(0.07)** | **0.13****0.65** | **Intercept****Slope Pre-Pub****Chg Intercept** | **23.20(1.24)****-0.01(0.04)** **4.06(2.20)** | **0.72****0.07** |
| **Google****Diarrhea****Searches (RSV)** | **Intercept Pre****Slope Pre-Pub****Chg Intercept****Chg Slope** **F-test** | **61.88(1.50)** **0.02(0.05)****14.37(2.07)** **0.20(0.07)** |  **0.75****<0.0001** **0.006****<0.0001** | **Intercept****Slope Pre-Pub****Chg Slope** | **57.80(1.67)** **0.24(0.05)** **0.16(0.08)** | **<0.0001** **0.06** | **Intercept****Slope Pre-Pub****Chg Intercept** | **59.18(1.20)** **0.12(0.04)****13.88(2.14)** |  **0.001****<0.0001** |
| **Diarrhea****Visits (Olmsted County)** | **Intercept Pre****Slope Pre-Pub****Chg Intercept****Chg Slope** **F-test** | **108.35(4.57)** **0.24(0.15)** **0.24(6.33)** **-0.26(0.21)** | **0.12****0.97****0.22****0.47** | **Intercept****Slope Pre-Pub****Chg Slope** | **108.28(4.18)** **0.24(0.12)** **-0.26(0.21)** | **0.04****0.22** | **Intercept****Slope Pre-Pub****Chg Intercept** | **111.89(3.55)** **0.10(0.10)** **0.88(6.32)** | **0.32****0.89** |

 aRSV=Relative search volume; bChg=Change; cIBS=Irritable bowel syndrome

 †change in intercept from pre-publication to post-publication

 ‡change in slope from pre-publication to post-publication

 βp-value for the 2 degree of freedom F test, for a simultaneous vertical shift and change in slope at publication.