Results

Dr. Adeeba Project

9/30/2018

## Comparing between Low and high level of DAS28 using Chi-Square test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Dependent: DAS28\_Group |  | DAS28 less than 3.2 | DAS28 greater than 3.2 | p |
| 51 | VAS | Mean (SD) | 0.6 (1.5) | 3.6 (2.6) | <0.001 |
| 21 | ESR | Mean (SD) | 22.6 (18.5) | 42.3 (24.8) | <0.001 |
| 14 | CRP | Mean (SD) | 8.7 (45.4) | 17 (44.5) | <0.001 |
| 26 | HAQ | Mean (SD) | 2.4 (34.6) | 2 (27.7) | <0.001 |
| 37 | Patient.s.Global.Assessment | Mean (SD) | 0.8 (1.7) | 3.9 (2.5) | <0.001 |
| 38 | Physician.s.Global.Assessment | Mean (SD) | 0.4 (1.1) | 2.6 (2.2) | <0.001 |
| 41 | SDAI | Mean (SD) | 6.8 (4.9) | 14.7 (4.1) | <0.001 |
| 13 | CDAI | Mean (SD) | 1.9 (4.1) | 17.1 (11.6) | <0.001 |
| 50 | Uric.acid | Mean (SD) | 274.5 (77.6) | 264.2 (80.2) | <0.001 |
| 17 | DAS28 | Mean (SD) | 2.1 (0.7) | 4.3 (0.8) | <0.001 |
| 20 | DOD.years1 | Mean (SD) | 8.5 (6.6) | 7.2 (6.8) | <0.001 |
| 1 | AGE.years1 | Mean (SD) | 52.6 (12.3) | 52.9 (12.4) | 0.568 |
| 47 | Tender | Mean (SD) | 0.6 (1.9) | 8.6 (7.5) | <0.001 |
| 46 | Swollen | Mean (SD) | 0.1 (0.6) | 2 (3.6) | <0.001 |
| 24 | Gender1 | female | 452 (49.4) | 463 (50.6) | <0.001 |
| 25 |  | male | 357 (62.0) | 219 (38.0) |  |
| 15 | Current1 | No | 644 (58.0) | 466 (42.0) | <0.001 |
| 16 |  | Yes | 115 (38.9) | 181 (61.1) |  |
| 39 | RF1 | Negative | 191 (60.6) | 124 (39.4) | 0.008 |
| 40 |  | Positive | 554 (52.1) | 509 (47.9) |  |
| 11 | CCP1 | Negative | 230 (54.5) | 192 (45.5) | 0.992 |
| 12 |  | Positive | 421 (54.5) | 351 (45.5) |  |
| 2 | ANA1 | Negative | 491 (55.8) | 389 (44.2) | 0.047 |
| 3 |  | Positive | 161 (49.4) | 165 (50.6) |  |
| 33 | Nodules1 | No | 639 (53.3) | 560 (46.7) | 0.721 |
| 34 |  | Yes | 15 (50.0) | 15 (50.0) |  |
| 42 | SICCA1 | No | 522 (52.9) | 465 (47.1) | 0.440 |
| 43 |  | Yes | 109 (50.0) | 109 (50.0) |  |
| 44 | Smoking1 | No | 490 (50.9) | 473 (49.1) | 0.719 |
| 45 |  | Yes | 59 (52.7) | 53 (47.3) |  |
| 22 | Family\_History1 | Negative | 442 (51.8) | 411 (48.2) | 0.397 |
| 23 |  | Positive | 93 (48.4) | 99 (51.6) |  |
| 4 | Asthma | No | 4913 (69.5) | 2152 (30.5) | 0.383 |
| 5 |  | Yes | 763 (68.2) | 355 (31.8) |  |
| 31 | Nationality1 | Kuwaiti’s | 429 (55.1) | 349 (44.9) | 0.475 |
| 32 |  | non-Kuwaiti’s | 380 (53.3) | 333 (46.7) |  |
| 35 | onbio | No | 3740 (70.1) | 1595 (29.9) | 0.047 |
| 36 |  | Yes | 1936 (68.0) | 912 (32.0) |  |
| 6 | Bio\_Mono | Combination | 1431 (67.5) | 688 (32.5) | 0.094 |
| 7 |  | Monotherapy | 505 (69.3) | 224 (30.7) |  |
| 8 |  | No | 3740 (70.1) | 1595 (29.9) |  |
| 18 | DM | No | 4619 (70.7) | 1912 (29.3) | <0.001 |
| 19 |  | Yes | 1057 (64.0) | 595 (36.0) |  |
| 9 | CAD | No | 5507 (69.3) | 2437 (30.7) | 0.646 |
| 10 |  | Yes | 169 (70.7) | 70 (29.3) |  |
| 27 | Hyperlipidemia | No | 5043 (69.5) | 2212 (30.5) | 0.419 |
| 28 |  | Yes | 633 (68.2) | 295 (31.8) |  |
| 29 | Hypertension | No | 4529 (70.5) | 1895 (29.5) | <0.001 |
| 30 |  | Yes | 1147 (65.2) | 612 (34.8) |  |
| 48 | UA\_Group | Low UA | 2083 (68.9) | 940 (31.1) | 0.054 |
| 49 |  | High UA | 331 (73.4) | 120 (26.6) |  |

## 

## Comparing between Low and high level of UA using Chi-Square test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Dependent: UA\_Group |  | Low UA | High UA | p |
| 51 | VAS | Mean (SD) | 1.1 (1.9) | 1.1 (2) | 0.597 |
| 23 | ESR | Mean (SD) | 33.6 (23) | 35.4 (28.9) | 0.583 |
| 14 | CRP | Mean (SD) | 11.5 (37.6) | 10.9 (18.1) | 0.441 |
| 28 | HAQ | Mean (SD) | 0.6 (0.6) | 0.7 (0.5) | 0.238 |
| 39 | Patient.s.Global.Assessment | Mean (SD) | 1.4 (2.2) | 1.4 (2.2) | 0.500 |
| 40 | Physician.s.Global.Assessment | Mean (SD) | 1 (1.7) | 0.9 (1.8) | 0.458 |
| 43 | SDAI | Mean (SD) | 8.3 (5.4) | 8.3 (5.1) | 0.734 |
| 13 | CDAI | Mean (SD) | 5.8 (9.2) | 5.5 (9.8) | 0.050 |
| 50 | Uric.acid | Mean (SD) | 251 (59.3) | 408.7 (49.8) | <0.001 |
| 17 | DAS28 | Mean (SD) | 2.9 (1.2) | 2.8 (1.3) | 0.028 |
| 22 | DOD.years1 | Mean (SD) | 7.6 (6.7) | 7.7 (6.4) | 0.635 |
| 1 | AGE.years1 | Mean (SD) | 51.2 (12.1) | 57.4 (11.5) | <0.001 |
| 49 | Tender | Mean (SD) | 2.4 (4.6) | 2.1 (4.8) | 0.049 |
| 48 | Swollen | Mean (SD) | 1.1 (2.5) | 1.1 (2.9) | 0.105 |
| 26 | Gender1 | female | 301 (90.1) | 33 (9.9) | 0.060 |
| 27 |  | male | 279 (85.3) | 48 (14.7) |  |
| 15 | Current1 | No | 450 (88.1) | 61 (11.9) | 0.665 |
| 16 |  | Yes | 90 (86.5) | 14 (13.5) |  |
| 41 | RF1 | Negative | 131 (91.6) | 12 (8.4) | 0.104 |
| 42 |  | Positive | 404 (86.5) | 63 (13.5) |  |
| 11 | CCP1 | Negative | 159 (89.8) | 18 (10.2) | 0.286 |
| 12 |  | Positive | 324 (86.6) | 50 (13.4) |  |
| 2 | ANA1 | Negative | 386 (88.3) | 51 (11.7) | 0.237 |
| 3 |  | Positive | 90 (84.1) | 17 (15.9) |  |
| 35 | Nodules1 | No | 437 (88.5) | 57 (11.5) | 0.001 |
| 36 |  | Yes | 12 (63.2) | 7 (36.8) |  |
| 44 | SICCA1 | No | 362 (88.7) | 46 (11.3) | 0.227 |
| 45 |  | Yes | 74 (84.1) | 14 (15.9) |  |
| 46 | Smoking1 | No | 329 (88.0) | 45 (12.0) | 0.425 |
| 47 |  | Yes | 48 (84.2) | 9 (15.8) |  |
| 24 | Family\_History1 | Negative | 316 (87.5) | 45 (12.5) | 0.320 |
| 25 |  | Positive | 48 (92.3) | 4 (7.7) |  |
| 4 | Asthma | No | 2847 (87.4) | 410 (12.6) | 0.005 |
| 5 |  | Yes | 177 (80.8) | 42 (19.2) |  |
| 33 | Nationality1 | Kuwaiti’s | 268 (89.0) | 33 (11.0) | 0.355 |
| 34 |  | non-Kuwaiti’s | 312 (86.7) | 48 (13.3) |  |
| 37 | onbio | No | 2255 (87.2) | 332 (12.8) | 0.611 |
| 38 |  | Yes | 769 (86.5) | 120 (13.5) |  |
| 6 | Bio\_Mono | Combination | 606 (89.4) | 72 (10.6) | <0.001 |
| 7 |  | Monotherapy | 163 (77.3) | 48 (22.7) |  |
| 8 |  | No | 2255 (87.2) | 332 (12.8) |  |
| 20 | DM | No | 2600 (88.4) | 340 (11.6) | <0.001 |
| 21 |  | Yes | 424 (79.1) | 112 (20.9) |  |
| 9 | CAD | No | 2902 (87.4) | 419 (12.6) | 0.002 |
| 10 |  | Yes | 122 (78.7) | 33 (21.3) |  |
| 29 | Hyperlipidemia | No | 2800 (87.2) | 410 (12.8) | 0.160 |
| 30 |  | Yes | 224 (84.2) | 42 (15.8) |  |
| 31 | Hypertension | No | 2647 (89.0) | 328 (11.0) | <0.001 |
| 32 |  | Yes | 377 (75.2) | 124 (24.8) |  |
| 18 | DAS28\_Group | DAS28 less than 3.2 | 2083 (86.3) | 331 (13.7) | 0.054 |
| 19 |  | DAS28 greater than 3.2 | 940 (88.7) | 120 (11.3) |  |

## GLM to Measure the effect from Rhuematiod factors on the levels of DAS28 Using Uni and Multivariate analysis

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Dependent: DAS28\_Group |  | DAS28 less than 3.2 | DAS28 greater than 3.2 | OR (univariable) | OR (multivariable) |
| 50 | VAS | Mean (SD) | 0.6 (1.5) | 3.6 (2.6) | 1.84 (1.79-1.89, p<0.001) | - |
| 20 | ESR | Mean (SD) | 22.6 (18.5) | 42.3 (24.8) | 1.04 (1.04-1.05, p<0.001) | - |
| 14 | CRP | Mean (SD) | 8.7 (45.4) | 17 (44.5) | 1.01 (1.01-1.02, p<0.001) | - |
| 25 | HAQ | Mean (SD) | 2.4 (34.6) | 2 (27.7) | 1.00 (1.00-1.00, p=0.794) | - |
| 36 | Patient.s.Global.Assessment | Mean (SD) | 0.8 (1.7) | 3.9 (2.5) | 1.80 (1.75-1.85, p<0.001) | - |
| 37 | Physician.s.Global.Assessment | Mean (SD) | 0.4 (1.1) | 2.6 (2.2) | 2.19 (2.11-2.27, p<0.001) | - |
| 40 | SDAI | Mean (SD) | 6.8 (4.9) | 14.7 (4.1) | 1.32 (1.30-1.35, p<0.001) | - |
| 13 | CDAI | Mean (SD) | 1.9 (4.1) | 17.1 (11.6) | 1.36 (1.35-1.38, p<0.001) | - |
| 49 | Uric.acid | Mean (SD) | 274.5 (77.6) | 264.2 (80.2) | 1.00 (1.00-1.00, p<0.001) | - |
| 19 | DOD.years1 | Mean (SD) | 8.5 (6.6) | 7.2 (6.8) | 0.97 (0.95-0.99, p=0.001) | 0.94 (0.90-0.98, p=0.006) |
| 1 | AGE.years1 | Mean (SD) | 52.6 (12.3) | 52.9 (12.4) | 1.00 (0.99-1.01, p=0.606) | - |
| 46 | Tender | Mean (SD) | 0.6 (1.9) | 8.6 (7.5) | 1.92 (1.87-1.98, p<0.001) | - |
| 45 | Swollen | Mean (SD) | 0.1 (0.6) | 2 (3.6) | 2.69 (2.50-2.91, p<0.001) | - |
| 23 | Gender1 | female | 452 (55.9) | 463 (67.9) | - | - |
| 24 |  | male | 357 (44.1) | 219 (32.1) | 0.60 (0.48-0.74, p<0.001) | 0.68 (0.46-0.98, p=0.041) |
| 15 | Current1 | No | 644 (84.8) | 466 (72.0) | - | - |
| 16 |  | Yes | 115 (15.2) | 181 (28.0) | 2.18 (1.68-2.83, p<0.001) | 1.26 (0.84-1.88, p=0.265) |
| 38 | RF1 | Negative | 191 (25.6) | 124 (19.6) | - | - |
| 39 |  | Positive | 554 (74.4) | 509 (80.4) | 1.42 (1.10-1.83, p=0.008) | 1.24 (0.82-1.88, p=0.313) |
| 11 | CCP1 | Negative | 230 (35.3) | 192 (35.4) | - | - |
| 12 |  | Positive | 421 (64.7) | 351 (64.6) | 1.00 (0.79-1.27, p=0.992) | 0.91 (0.63-1.33, p=0.640) |
| 2 | ANA1 | Negative | 491 (75.3) | 389 (70.2) | - | - |
| 3 |  | Positive | 161 (24.7) | 165 (29.8) | 1.29 (1.00-1.67, p=0.048) | 0.91 (0.62-1.32, p=0.610) |
| 32 | Nodules1 | No | 639 (97.7) | 560 (97.4) | - | - |
| 33 |  | Yes | 15 (2.3) | 15 (2.6) | 1.14 (0.55-2.37, p=0.721) | 0.74 (0.17-3.31, p=0.685) |
| 41 | SICCA1 | No | 522 (82.7) | 465 (81.0) | - | - |
| 42 |  | Yes | 109 (17.3) | 109 (19.0) | 1.12 (0.84-1.51, p=0.440) | 1.05 (0.66-1.66, p=0.843) |
| 43 | Smoking1 | No | 490 (89.3) | 473 (89.9) | - | - |
| 44 |  | Yes | 59 (10.7) | 53 (10.1) | 0.93 (0.63-1.38, p=0.719) | 1.23 (0.71-2.17, p=0.466) |
| 21 | Family\_History1 | Negative | 442 (82.6) | 411 (80.6) | - | - |
| 22 |  | Positive | 93 (17.4) | 99 (19.4) | 1.14 (0.84-1.57, p=0.398) | - |
| 4 | Asthma | No | 4913 (86.6) | 2152 (85.8) | - | - |
| 5 |  | Yes | 763 (13.4) | 355 (14.2) | 1.06 (0.93-1.22, p=0.384) | - |
| 30 | Nationality1 | Kuwaiti’s | 429 (53.0) | 349 (51.2) | - | - |
| 31 |  | non-Kuwaiti’s | 380 (47.0) | 333 (48.8) | 1.08 (0.88-1.32, p=0.475) | - |
| 34 | onbio | No | 3740 (65.9) | 1595 (63.6) | - | - |
| 35 |  | Yes | 1936 (34.1) | 912 (36.4) | 1.10 (1.00-1.22, p=0.047) | - |
| 6 | Bio\_Mono | Combination | 1431 (25.2) | 688 (27.4) | - | - |
| 7 |  | Monotherapy | 505 (8.9) | 224 (8.9) | 0.92 (0.77-1.11, p=0.385) | - |
| 8 |  | No | 3740 (65.9) | 1595 (63.6) | 0.89 (0.80-0.99, p=0.030) | - |
| 17 | DM | No | 4619 (81.4) | 1912 (76.3) | - | - |
| 18 |  | Yes | 1057 (18.6) | 595 (23.7) | 1.36 (1.21-1.52, p<0.001) | - |
| 9 | CAD | No | 5507 (97.0) | 2437 (97.2) | - | - |
| 10 |  | Yes | 169 (3.0) | 70 (2.8) | 0.94 (0.70-1.24, p=0.646) | - |
| 26 | Hyperlipidemia | No | 5043 (88.8) | 2212 (88.2) | - | - |
| 27 |  | Yes | 633 (11.2) | 295 (11.8) | 1.06 (0.92-1.23, p=0.419) | - |
| 28 | Hypertension | No | 4529 (79.8) | 1895 (75.6) | - | - |
| 29 |  | Yes | 1147 (20.2) | 612 (24.4) | 1.28 (1.14-1.43, p<0.001) | - |
| 48 | UA\_Group | Low UA | 2083 (86.3) | 940 (88.7) | - | - |
| 47 |  | High UA | 331 (13.7) | 120 (11.3) | 0.80 (0.64-1.00, p=0.054) | - |

## GLM to Measure the effect from Rhuematiod factors on the levels of UA Using Uni and Multivariate analysis

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Dependent: UA\_Group |  | Low UA | High UA | OR (univariable) | OR (multivariable) |
| 50 | VAS | Mean (SD) | 1.1 (1.9) | 1.1 (2) | 1.00 (0.95-1.05, p=0.929) | - |
| 23 | ESR | Mean (SD) | 33.6 (23) | 35.4 (28.9) | 1.00 (1.00-1.01, p=0.144) | - |
| 14 | CRP | Mean (SD) | 11.5 (37.6) | 10.9 (18.1) | 1.00 (1.00-1.00, p=0.748) | - |
| 28 | HAQ | Mean (SD) | 0.6 (0.6) | 0.7 (0.5) | 1.24 (0.59-2.40, p=0.539) | - |
| 39 | Patient.s.Global.Assessment | Mean (SD) | 1.4 (2.2) | 1.4 (2.2) | 0.99 (0.95-1.04, p=0.707) | - |
| 40 | Physician.s.Global.Assessment | Mean (SD) | 1 (1.7) | 0.9 (1.8) | 0.99 (0.93-1.05, p=0.727) | - |
| 43 | SDAI | Mean (SD) | 8.3 (5.4) | 8.3 (5.1) | 1.00 (0.98-1.02, p=0.984) | - |
| 13 | CDAI | Mean (SD) | 5.8 (9.2) | 5.5 (9.8) | 1.00 (0.99-1.01, p=0.522) | - |
| 17 | DAS28 | Mean (SD) | 2.9 (1.2) | 2.8 (1.3) | 0.93 (0.85-1.01, p=0.071) | - |
| 22 | DOD.years1 | Mean (SD) | 7.6 (6.7) | 7.7 (6.4) | 1.00 (0.96-1.04, p=0.959) | 0.94 (0.79-1.05, p=0.402) |
| 1 | AGE.years1 | Mean (SD) | 51.2 (12.1) | 57.4 (11.5) | 1.04 (1.02-1.07, p<0.001) | - |
| 49 | Tender | Mean (SD) | 2.4 (4.6) | 2.1 (4.8) | 0.99 (0.97-1.01, p=0.355) | - |
| 48 | Swollen | Mean (SD) | 1.1 (2.5) | 1.1 (2.9) | 1.00 (0.96-1.04, p=0.987) | - |
| 26 | Gender1 | female | 301 (51.9) | 33 (40.7) | - | - |
| 27 |  | male | 279 (48.1) | 48 (59.3) | 1.57 (0.98-2.53, p=0.061) | 2.06 (0.86-5.04, p=0.106) |
| 15 | Current1 | No | 450 (83.3) | 61 (81.3) | - | - |
| 16 |  | Yes | 90 (16.7) | 14 (18.7) | 1.15 (0.59-2.09, p=0.665) | 1.87 (0.72-4.62, p=0.180) |
| 41 | RF1 | Negative | 131 (24.5) | 12 (16.0) | - | - |
| 42 |  | Positive | 404 (75.5) | 63 (84.0) | 1.70 (0.92-3.40, p=0.108) | 3.35 (0.99-15.67, p=0.077) |
| 11 | CCP1 | Negative | 159 (32.9) | 18 (26.5) | - | - |
| 12 |  | Positive | 324 (67.1) | 50 (73.5) | 1.36 (0.78-2.47, p=0.288) | 0.83 (0.32-2.29, p=0.706) |
| 2 | ANA1 | Negative | 386 (81.1) | 51 (75.0) | - | - |
| 3 |  | Positive | 90 (18.9) | 17 (25.0) | 1.43 (0.77-2.55, p=0.239) | 0.84 (0.26-2.36, p=0.757) |
| 35 | Nodules1 | No | 437 (97.3) | 57 (89.1) | - | - |
| 36 |  | Yes | 12 (2.7) | 7 (10.9) | 4.47 (1.61-11.59, p=0.003) | 3.39 (0.40-22.07, p=0.214) |
| 44 | SICCA1 | No | 362 (83.0) | 46 (76.7) | - | - |
| 45 |  | Yes | 74 (17.0) | 14 (23.3) | 1.49 (0.75-2.79, p=0.229) | 1.42 (0.48-3.76, p=0.501) |
| 46 | Smoking1 | No | 329 (87.3) | 45 (83.3) | - | - |
| 47 |  | Yes | 48 (12.7) | 9 (16.7) | 1.37 (0.60-2.87, p=0.426) | 0.68 (0.17-2.16, p=0.547) |
| 24 | Family\_History1 | Negative | 316 (86.8) | 45 (91.8) | - | - |
| 25 |  | Positive | 48 (13.2) | 4 (8.2) | 0.59 (0.17-1.52, p=0.325) | - |
| 4 | Asthma | No | 2847 (94.1) | 410 (90.7) | - | - |
| 5 |  | Yes | 177 (5.9) | 42 (9.3) | 1.65 (1.15-2.32, p=0.005) | - |
| 33 | Nationality1 | Kuwaiti’s | 268 (46.2) | 33 (40.7) | - | - |
| 34 |  | non-Kuwaiti’s | 312 (53.8) | 48 (59.3) | 1.25 (0.78-2.02, p=0.355) | - |
| 37 | onbio | No | 2255 (74.6) | 332 (73.5) | - | - |
| 38 |  | Yes | 769 (25.4) | 120 (26.5) | 1.06 (0.84-1.32, p=0.611) | - |
| 6 | Bio\_Mono | Combination | 606 (20.0) | 72 (15.9) | - | - |
| 7 |  | Monotherapy | 163 (5.4) | 48 (10.6) | 2.48 (1.65-3.70, p<0.001) | - |
| 8 |  | No | 2255 (74.6) | 332 (73.5) | 1.24 (0.95-1.63, p=0.120) | - |
| 20 | DM | No | 2600 (86.0) | 340 (75.2) | - | - |
| 21 |  | Yes | 424 (14.0) | 112 (24.8) | 2.02 (1.59-2.55, p<0.001) | - |
| 9 | CAD | No | 2902 (96.0) | 419 (92.7) | - | - |
| 10 |  | Yes | 122 (4.0) | 33 (7.3) | 1.87 (1.24-2.76, p=0.002) | - |
| 29 | Hyperlipidemia | No | 2800 (92.6) | 410 (90.7) | - | - |
| 30 |  | Yes | 224 (7.4) | 42 (9.3) | 1.28 (0.90-1.79, p=0.161) | - |
| 31 | Hypertension | No | 2647 (87.5) | 328 (72.6) | - | - |
| 32 |  | Yes | 377 (12.5) | 124 (27.4) | 2.65 (2.10-3.34, p<0.001) | - |
| 19 | DAS28\_Group | DAS28 less than 3.2 | 2083 (68.9) | 331 (73.4) | - | - |
| 18 |  | DAS28 greater than 3.2 | 940 (31.1) | 120 (26.6) | 0.80 (0.64-1.00, p=0.054) | - |