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|  | **Supplementary Table S2. Single gene or pathway methylation studies of childhood adversity and possible effects of differentially methylated genes that are studied in asthma** |
| Article | Definition of Child Maltreatment | Sample size | Age at the time of DNA sampling (Mean, Median or range) | Country | Tissue | Studied genes | Significantly differently methylated asthma related genes | Possible outcome for asthma |
| McGowan, 2009 | Psychiatric diagnosed sucidals | 12 abused suicide12 non abused suicide12 controls | 34(10)33.8(11)35.8(12) | Canada | Brain | Single gene methylation (NR3C1) | NR3C1 | decreased suppression of inflammation |
| Vijayendran, 2012 | Questionnaire | 26 cases136 controls | 45 (7)46(8) | USA | Blood | Single gene methylation (SLC6A4) | SLC6A4 (SERT) | Possible role on the concentrations of 5-HT |
| Xie, 2012 | Self reported | 435 cases1771 controls | Men 38.1(11)Women 37.2(11) | USA | Blood or saliva | Single gene methylation(CHRNA5) | CHRNA5 | Increased nicotine dependency in men |
| Zhang, 2013 | Questionnaire | 149 cases369 controls | 18-54 years | USA | Blood | Selected 82 Candidate genes | CHRNA5HTR1BALDH1A1 | Increased nicotine dependency |
| Ouellrt-Morin, 2013 | Self reported | 28 monozygotic twins | 12 | UK | Buccal cells | Single gene methylation (SERT) | SLC6A4 (SERT) | Possible role on the concentrations of 5-HT |
| Knaap, 2014 | Self reported | 468 cases | 16.1 | Netherlands | Blood | Single gene methylation (NR3C1) | NR3C1 | Decreased suppression of inflammation |
| Frodl, 2015 | Childhood trauma questionnaire | 25 cases35 controls | 41.6(10.8)35.6(13) | Ireland | Blood | Single gene methylation (SLC6A4) | SLC6A4 (SERT) | Possible role on the concentrations of 5-HT |
| Tyrka, 2015 | Record reviews | 69 cases105 controls | 49.87Months(8.4Months) | USA | Saliva | Single gene methylation (FKBP5 and NR3C1) | FKBP5 NR3C1 | Increased inflammation in lung epithelium |
| Tyrka, 2016 | Childhood trauma questionnaire | 133 adversity/disorder51 no adversity/disorder60 adversity/no disorder96 no adversity/ no disorder | 35.95(12.37)32.08(11.29)31.9(10.19)29.6(10.04) | USA | Blood | Single gene methylation (NR3C1) | NR3C1 | Decreased suppression of inflammation |
| Shields, 2016 | Questionnaire | 153 cases142 controls | 52.854.9 | USA | Blood | Single gene methylation (NR3C1) | NR3C1 | Decreased suppression of inflammation |
| Smearman, 2016 | Childhood trauma questionnaire | 89 Severe abused100 Moderate 200 None or Mild | 42.4(11.3)40.1(13.2)41.3(13.2) | USA | Blood | Single gene methylation (OXTR) | OXTR | airway hyper-responsiveness in asthma |
| Cicchetti, 2017 | Child protective services | 285 maltreated249 non-maltreated | 9.45(0.92)9.37(0.85) | USA | Saliva | Single gene methylation(FKBP5)n (NR3C1) | NR3C1 | Decreased suppression of inflammation |
| Beach ,2010 | Questionnare | 96 men96 women | Men: 35-69(mean 49)Women: 35-65 (mean 47) | USA | Blood | Single gene methylation (SLC6A4) | SLC6A4 |  |
| Beach ,2011 | Questionnare | 15 sexual abused140 non abused | Not given | USA | Blood | Single gene methylation(5HTT) | 5HTT |  |
| Hecker, 2016 | Self-reported | 35 High exposure25 Low exposure | 11.311.76 | Tanzania | SalivaBlood | Single gene methylation(POMC) | POMC |  |
| Fiacco,2019 | Questionnare | 73 Adversity30 No adversity | 54(8.86)51(9.19) | Switzerland | Dried blood spots | Single gene methylation(NR3C1 and ER alpha shore) | ER alpha shore |  |
| Klengel, 2012 | Self reported | 30 childhood trauma46 Non trauma | 41.4 (11.67)40.97(11.86) | USA | SalivaWhole blood | Single gene methylation(FKBP5) | FKBP5 |  |
| Gouin, 2017 | Questionnare | 24 high ELA22 low ELA | 27 | Canada | Blood | Single gene methylation(OXTR) | OXTR |  |
| Romens,2015 | Self-reported | 18 child maltreatment38 control | 12.11(0.78) | Finland | Whole blood | Single gene methylation(NR3C1) | NR3C1 |  |
| Perroud, 2011 | Questionnare | 101 BPD99 MDD15 MDD+comorbid PTSD | 30.76(9.74)41.63(12.81)37.33(10.48) | Sweden | Blood | Single gene methylation(NR3C1) | NR3C1 |  |
| Houtepen,2016 | Questionnare | 45 sexually abused85 control | 2833 | Netherlands | Blood | Single gene methylation(KITLG) | KITLG |  |

 ELA(early life adversities), BPD(borderline personality disorder ), MDD (major depressive disorder), PTSD(post- traumatic stress disorder)

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