Supplementary Material to:

**EPA guidance on the early detection of clinical high risk states of psychoses**

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# S.1. Procedures and formulae of meta-analyses

Although proportions are strictly speaking no measure of effect, they are commonly used in meta-analyses of univariate studies when the assessment of measure of interest is comparable across studies [1]. As this can be assumed in early detection studies in that first-episode psychosis is generally diagnosed according to DSM-IV, we used the proportions of conversions at follow-up (*Ei* = with *ki* = number of patients having developed psychosis at follow-up *tx*, and *ni* = (sub)sample size at baseline) and their variance (*Vi* = (1 – ) / *ni*) as effect estimates in a fixed-effects model [1]. The inverse variance was used as weight *i* to account for the different sample size of studies [1]. Pooled effects and their variance were calculated as = and = ; 95% confidence intervals (CIs) of single and pooled effects were calculated as *Ei* ± (0.98×*Vi*). Pooled sample effects were tested by the *z*-statistic with *z* = and were assumed significant at  = 5% when *z* > 1.96 and at  = 1% when *z* > 2.58 [1].

Heterogeneity between *Ei*s included in were tested by the *Q*-statistic, a type of 2-statistic with *df* = *l* – 1 and *l* = number of *Ei*s [1]. The formula used was *Q* = . Additionally, *I*2 (= ) was calculated as an estimate of the relative size of heterogeneity [1]. In line with Higgins et al. [2], *I*2 values of 25%, 50% and 75% were regarded as signifying low, moderate and high heterogeneity; and negative values of *I*2 were put at zero.

Whenever significant heterogeneity was detected indicating that considerable variance might have been introduced by sources other than the sampling error considered in the fixed-effects model, a random-effects model was applied [1]. Thereby, the additional test variance 2 was calculated as 2 = and added to *Vi* to calculate the variance of *Ei* (*Vi\**); if 2 takes on a negative value, this is usually interpreted as meaning that the random-effects variance is inconsequential (i.e., equal to zero) and the random-effects model collapses to a fixed-effects model meta-analysis [3]. The inverse value of *Vi\** provided the weight *i\**. Using *Vi\** and *i\** in the same formulae as in the fixed-effect model, , as well as the related 95% CIs and *z*-values were computed.

# S.2. Sensitivity analyses

To estimate the influence of assessment scales and, relatedly, definitions of UHR criteria (SIPS, CAARMS early versions, CAARMS 2006 version), type of ARMS criteria and combinations (APS, BLIPS, GRFD, COPER, COGDIS, UHR plus COGDIS, UHR and/or COGDIS), and age characteristic of the sample (CAD, YOUTH or ADULT), the above analyses (see S.1.) were performed with these subgroups in addition.

The resulting pooled effect sizes that are essentially proportions were converted into percentages of conversion rates ( / × 100%) and compared for significant differences using exploratory one-dimensional 2-tests (with *df* = number of effect sizes – 1) unadjusted for multiple testing.

# S.3. Supplementary Table 1

STable 1 List and description of studies included in the meta-analysis (main text reference number in blue) and the guidance authors’ rating of the grade of evidence (GE)

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| --- | --- | --- | --- | --- | --- | --- |
| **Australia** | | | | | | |
| **[77]**  Nelson et al. 2013 [4]  PACE 400 study  **GE:**  **2+** | Specialized early detection service: Personal Assessment and Crisis Evaluation (PACE) clinic  Mixed: includes 3 intervention and 4 observational studies conducted between 1993 and 2006.  % response: 74.8% of eligible sample (n=416) | N=311  Age: 14-30 yrs.  (Mdn=18 yrs.)  Assigned age group: YOUTH  % male: 48.1%  Co-morbidities: Not reported | BPRS (n=407-409) and  CAARMS (before 2006 version; n=389-397)  Of eligible sample:  APS: n=316 (79.4%)  BLIPS: n=56 (14.1%)  GRFD: n=115 (28.9%) | ≤14.9 yrs.  (min. 2.4 yrs.; 7.5±3.2 yrs.)  Missing observations:  2-4 yrs.: n=0 (0%)  4-6 yrs.: n=52 (16.7%)  6-8 yrs.: n=135 (43.4%)  8-10 yrs.: n=179 (57.5%)  10-12 yrs.: n=214 (68.8%)  12-15 yrs: n=285 (91.6%) | Overall: n=114 (36.7%)  1 yr.: n=65 (20.9%)  2 yrs.: n=79 (25.4%)  3 yrs.: n=94 (30.2%)  4 yrs.: n=102 (32.8%)  Estimated conversion rates (Kaplan-Meier)  1 yr.: 16.5% (12.7-20.1)  2 yrs.: 20.4% (16.3-24.4)  3 yrs.: 24.9% (20.4-29.2)  4 yrs.: 27.6% (22.8-32.1)  5 yrs.: 30.1% (25.0-34.8)  10-15 yrs.: 34.9% (28.7-40.6) | Conversion according to BPRS/CAARMS or state public mental health records  *Note*: Converters might not have sought help after conversion and, consequently, might not show in state public mental health records  Diagnoses: Not reported |
| **[78]**  Nelson et al.  2011 [5]  Partly includes PACE 400 sample  **GE: 2+** | Specialized early detection service: PACE clinic  Mixed: also includes participants of intervention studies (n=208) but predominately observational study on patients presented between 01/2000 and 11/2008  % response: 88.0% of eligible sample (n=928) | N=817  Age: 14-29 yrs. (Mdn: 18 yrs.)  Assigned age group: YOUTH  % male: 40.8%  Co-morbidities: Not reported | CAARMS (before 2006 version)  APS: n=664 (81.3%)  BLIPS: n=36 (4.4%)  GRFD: n=209 (25.6%)  APS+GRFD: n=92 (11.3%) | 6 mths.  Missing observations:  for conversion: 0%  CAARMS follow-up assessment: n=307 (37.6%) | Overall: n=72 (8.8%)  APS: n=62 (9.3%)  BLIPS: n=5 (13.9%)  GRFD: n=13 (6.2%)  APS+GRFD: n=8 (8.7%) | Conversion according to CAARMS or state public mental health records  *Note*: Converters might not have sought help after conversion and, consequently, might not show in state public mental health records  Schizophrenia spectrum disorder: 23%  Psychotic Disorder NOS: 53%  **All non-affective psychosis: 76%**  Mood disorder with psychotic features: 14%  **All affective psychosis: 14%** |
| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| **[79]**  Nelson et al.  2012 [6]  **GE: 2+** | Specialized early detection service: PACE clinic  Observational study of patients presenting between 05/2008 and 07/2010, includes some of [15]  % response: Not reported | N=49  Age: 19.2±2.9 yrs. (15-25 yrs.)  Assigned age group: MIX  % male: 44.9%  Co-morbidities: 57.1% with mood disorder, 16.3% with anxiety disorder, 8.2% with other axis-I disorder; 14.3% schizotypal personality disorder | CAARMS 2006 version  APS: n=37 (75.5%)  BLIPS: n=1 (2.0%)  GRFD: n=4 (8.2%)  APS+GRFD: n=7 (14.3%) | 569±345 days (Mdn: 676 days)  Missing observations:  for conversion: 0%  CAARMS follow-up assessment: n=8 (16.3%) | Overall: n=13 (26.5%)  Cumulative conversion rate in % ±SE (Kaplan-Meier)  6 mths.: 22.8±4.0  1 yr.: 24.9±3.6  2 yrs.: 27.6±3.7 | Conversion according to CAARMS or state public mental health records  *Note*: Converters might not have sought help after conversion and, consequently, might not show in state public mental health records  Schizophrenia spectrum disorder: 61.5%  Other psychotic diagnosis (incl. affective psychosis and psychosis NOS): 38.5% |
| **[80,81]**  Yung et al. 2006, 2008 [7,8]  **GE: 2+** | No specialized early detection service: ORYGEN Youth Health  Observational study including some PACE 400 participants of 04-10/2003 (n≤76)  % response: 76.6% of eligible sample (n=381) | N=292  Age: mean: 18.1 yrs. (15-24 yrs.)  Assigned age group: YOUTH  % male: 48.9%  Co-morbidities: Only reported for Youthscope subsample (n=149): 23.4% any axis-I disorder; 46.3% mood disorders, 42.3% anxiety disorders, 22.1% substance use disorders, 7.4% eating disorders | CAARMS (before 2006 version)  UHR: n=119 (40.7%)  APS: n=111 (38.0%)  BLIPS: 0%  GRFD: n=13 (4.5%)  none: n=173 (59.2%) | 2 yrs.  Missing observations:  for conversion: 0%  CAARMS 6-mths. assessment: n=97 (33.2%)  CAARMS 2-yrs. assessment: n=99 (33.9%) | UHR:  6 mths.: n=12 (10.1%)  2 yrs.: n=19 (15.9%)  none:  6 mths.: n=1 (0.6%)  2 yrs.: n=2 (1.2%) | Conversion according to CAARMS or state public mental health records  *Note*: Converters might not have sought help after conversion and, consequently, might not show in state public mental health records  Diagnoses: Not reported |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **[82]**  Bechdolf et al. 2010 [9]  **GE: 2+** | Specialized early detection service: PACE clinic  Observational study of PACE patients presenting in 2007, includes some of [13]  % response: Not reported | N=92  Age: 18.0±3.0 yrs. (15-24 yrs.)  Assigned age group: YOUTH  % male: 34.8%  Co-morbidities: 56.5% depression, 8.7% anxiety disorder, 8.7% dysthymia or cyclothymia, 15.2% PTSD, 3,3% adjustment disorder | CAARMS 2006 version  APS: n=74 (80.4%)  BLIPS: n=5 (5.4%)  GRFD: n=28 (30.4%) | ≤26 mths.  (min. 14 mths., 682±283 days)  Missing observations:  Not reported | Overall: n=20 (21.7%) | Conversion according to CAARMS  Schizophrenia: 30%  Delusional disorder: 5%  Unspecified acute psychotic disorder: 50%  **All non-affective psychosis: 85%**  Depression with psychotic features: 15%  **All affective psychosis: 15%** |
| **[67]**  Mason et al. 2004 [10]  **GE: 2+** | Specialized early detection service: Psychological Assistance Service (PAS) of Hunter Mental Health in New South Wales, Australia  Observational study  % response: 56.9% of eligible sample (n=130) | N=74  Age: 17.3±2.8 yrs. (13-28 yrs.)  Assigned age group: YOUTH  % male: 52.7%  Co-morbidities: Not reported | CAARMS (before 2006 version)  APS: n=43 (58.1%)  BLIPS: n=23 (31.1%)  GRFD: n=19 (25.7%) | ≥1 yr. (26.3±9.2 mths.)  Missing observations:  Not reported | Overall: n=37 (50.0%)  APS: n= 22 (51.2%)  BLIPS: n=14 (60.8%)  GRFD: n=2 (10.5%) | Conversion according to DSM-IV and/or CAARMS  Schizophrenia: 18.9%  Schizoaffective disorder: 27%  Depression with psychotic features: 18.9%  Mania with psychotic features: 5.4%  Bipolar disorder with psychotic features: 5.4%  Unspecified psychotic episode according to CAARMS: 24.3% |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **[83]**  Welsh & Tiffin 2013 [11]  **GE: 2+** | Specialized early detection service: Follow-up of At-Risk Mental State for Psychosis – FARMS Clinic  Observational study  % response: Not reported | N=30  Age: 15.8±1.4 yrs. (12-18 yrs.)  Assigned age group: CAD  % male: 47%  Co-morbidities: 43% depressive disorders, 20% anxiety disorder, 17% pervasive developmental disorder, 7% behavioural disorders, 7% other disorders | CAARMS 2006 version  APS: n=30 (100%)  GRFD: n=4 (13.3%) | 2 yrs.  Missing observations:  6 mths.: n=1 (3%)  1 yr.: n=4 (13%)  2 yrs.: n=2 (6.7%)  CAARMS 1- and 2-yrs. assessments: majority | 6 mths: n=1 (3.4%)  1 yr.: n=1 (3.4%)  2 yrs.: n=2 (7.1%) | Conversion according to CAARMS and/or medical records  *Note*: Converters might not have sought help after conversion and, consequently, might not show in state public mental health records  Schizophrenia: 50%  Other psychotic disorder: 50%  **All non-affective psychosis: 100%** |
| **North America** | | | | | | |
| **[70]**  Cannon et al. 2008 [12] ; Addington et al., 2007 [13]  North American Prodrome Longitudinal Study  (NAPLS 1)  **GE: 2+** | Mixed, centres with and without specialized early detection services included.  Pooled sample from initially independent 7 observational and intervention studies with ≥1 follow-up  % response: 78.6% of eligible sample (n=370) | N=291  Age: 18.1±4.6 yrs. (12-30 yrs.)  Assigned age group: YOUTH  % male: 58.4%  Co-morbidities of eligible sample (n=370): 34.9% with mood disorder, 30.4% with anxiety disorder, 15.3% with alcohol abuse or dependence, 19.5% with drug abuse/dependence | SIPS 3.0  APS: n=282 (96.9%)  BLIPS: n=7 (2.4%)  GRFD: n=2 (0.7%) | ≤2.5 yrs.  (non-converters: 575±258 days)  Missing observations:  Not reported | Overall: n=82 (28.2%)  APS: n=79 (28.0%)  BLIPS: n=3 (42.9%)  GRFD: 0%  Cumulative conversion rate in % ±SE (Kaplan-Meier)  6 mths.: 12.7±1.9  1 yr.: 21.7±2.5  2 yrs.: 32.6±3.3  2.5 yrs.: 35.3±3.7  1 yr.: n=63 (21.7%)  2 yrs.: n=95 (32.6%)  2.5 yrs.: n=103 (35.3%) | Conversion according to SIPS  Diagnoses: Not reported |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **[71]**  Schlosser et al. 2012 [14]  **GE: 2+** | Specialized early detection service: Staglin Music Festival Centre for the Assessment and Prevention of Prodromal States (CAPP)  Observational study  % response: Not reported | N=125  Of n=84 with ≥1 follow-up:  Age: 16.9±3.5 yrs.  Assigned age group: YOUTH  % male: 62%  Co-morbidities: 47.6% with anxiety disorder, 44% with mood disorder | SIPS 3.0  Of n=84 with ≥1 follow-up:  APS: n=65 (78.4%)  BLIPS: n=17 (20.2%)  GRFD: n=2 (2.4%) | <2 yrs.  Missing observations:  overall: n=41 (32.8%) no follow-up assessment | Overall: n=27 (21.6%)  Of n=84 with ≥1 follow-up:  APS: n=17 (26.2%)  BLIPS: n=10 (58.8%)  GRFD: n=0 (0%) | Conversion according to SIPS  Diagnoses: Not reported |
| **[72]**  Carrión et al. 2013 [15]  **GE: 2+** | Specialized early detection service: Recognition and Prevention (RAP) program, Glen Oaks, NY  Observational study, some participants included in NAPLS 1  % response: Not reported | N=101  Of n=92 with ≥1 follow-up:  Age: 15.9±2.2 yrs. (12-22 yrs.)  Assigned age group: CAD  % male: 63.0%  Co-morbidities: 63% mood disorders, 57.6% anxiety disorders, 9.8% substance-use disorders | SIPS 3.0  Of n=92 with ≥1 follow-up:  APS: n=92 (100%);  BLIPS as exclusion criterion | Mean: 3.0±1.6 yrs. (Mdn=2.8 yrs.)  Missing observations:  Overall: n=9 (9%) no follow-up assessment | Overall: n=15 (14.9%) | Conversion according to SIPS  Diagnoses: Not reported |
| **[73]**  Woodberry et al. 2010 [16]  **GE: 2+** | Specialized early detection service: Portland Identification and Early Referral (PIER) program  Observational study  % response: 81.1% of eligible sample (n=90) | N=73  Age: 16.5±2.5 yrs. (12-25 yrs.)  Assigned age group: YOUTH  % male: 53%  Co-morbidities: Not reported | SIPS  APS: n=65 (89%)  BLIPS: n=5 (7%)  GRFD: n=3 (4%)  BLIPS excluded from analyses, because included in conversion criteria | ≤2 yrs.  Missing observations:  2 yrs.: n=16 (21.9%); only mean follow-up of 7 mths. | APS and GRFD only (n=68):  n=13 (19.1%) | Conversion defined as development of any positive item rated 6 on the SIPS  Diagnoses: Not reported |
| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| **[74]**  Addington et al. 2011 [17]  **GE: 2+** | Specialized early detection service: PRIME Clinic at the Centre for Addiction and Mental Health, Toronto  Intervention study: CBT vs. supportive therapy  % response: 50.0% of eligible sample (n=112) consented to the study (n=56), 5 dropped out before randomization | N=24 of supportive therapy condition  Age: 21.1±3.74 yrs. (14-30 yrs.)  Assigned age group: ADULT  % male: 35.3%  Co-morbidities of all randomized participants (n=51): 25.5% mood disorders, 17.7% anxiety disorders, 5.9% alcohol abuse, 9.8% cannabis abuse | SIPS 3.0  APS: n=24 (100%)  BLIPS: 0%  GRFD: 0% | 1.5 yrs.  Missing observations:  6 mths.: n=8 (33.3%)  1 yr.: n=9 (37.5%)  1.5 yrs.: n=11 (45.8%) | Overall: n=3 (12.5%)  6 mths.: n=3 (12.5%)  1yr.: n=3 (12.5%)  2 yrs.: n=3 (12.5%) | Conversion according to SIPS  Schizophrenia: 100%  **All non-affective psychosis: 100%** |
| **[75]**  Buchy et al. 2014 [18]  Enhancing the Prospective Prediction Psychosis (PREDICT) study  **GE: 2+** | Specialized early detection services: PRIME clinics of the Universities of Toronto, North Carolina and Yale  Observational study  % response: Not reported | N=170  Age: 19.7±4.5 yrs. (12-31 yrs.)  Assigned age group: MIX  % male: 56.5%  Co-morbidities: Not reported | SIPS 5.0  APS: n=167 (98.2%)  BLIPS: 0%  GRFD: n=6 (3.5%) | ≤4 yrs.  Missing observations:  Not reported | Overall: n=29 (17.1%) | Conversion according to SIPS  Diagnoses: Not reported |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **[76]**  Kayser et al. 2013 [19]  **GE: 2+** | Specialized early detection service: Centre of Prevention and Evaluation (COPE), New York State Psychiatric Institute, Columbia University  Observational study  % response: Not reported | N=24  Of n=21 analysed:  Age: 21.4±3.8 yrs. (13-27 yrs.)  Assigned age group: ADULT  % male: 48.1%  Co-morbidities: Not reported | SIPS 3.0  APS: n=21 (100%)  BLIPS: 0%  GRFD: 0% | ≤4 yrs.  Missing observations:  Overall: n=3 (12.5%) | 4 yrs.: n=3 (12.5%) | Conversion according to SIPS  Diagnoses: “typically schizophrenia”  All conversions in patients of age ≥16 years |
| **Germany** | | | | | | |
| **[84,85]**  Klosterkötter et al. 2001 [20]; Schultze-Lutter et al. 2006 [21]  Cologne Early Recognition (CER) study on that COPER and COGDIS were developed  **GE: 2+** | No specialized early detection service.  Outpatient departments of German psychiatric university departments  Observational study  % response: 42% of eligible sample (n=385) | N=160  Age: 29.3±10.0 yrs. (15-53 yrs.)  Assigned age group: ADULT  % male: 52.5%  Co-morbidities: 36.2% personality disorders, 29.4% affective disorders, 17.5% somatoform disorders, 16.9% anxiety disorders | BSABS  Intake criteria: clinical suspicion of beginning psychosis and assessment for basic symptoms, no past or present psychosis  COPER: n=106 (66.3%)  COGDIS: n=67 (41.88%)  none: n=54 (33.8%) | 9.6±7.6 yrs.  (5-37 yrs.)  Missing observations:  >4 years: 0% | Of those with the criterion:  COPER  1 yr.: n=21 (19.8%)  2 yrs.: n=39 (36.8%)  3 yrs.: n=53 (50.0%)  >3 yrs.: n=69 (65.1%)  COGDIS  1 yr.: n=16 (23.9%)  2 yrs.: n=31 (46.3%)  3 yrs.: n=41 (61.2%)  >3 yrs.: n=53 (79.1%) | Conversion to schizophrenia according to DSM-IV  Schizophrenia: 100%  **All non-affective psychosis: 100%** |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| --- | --- | --- | --- | --- | --- | --- |
| **[86]**  Schultze-Lutter et al. 2014 [22]  **GE: 2+** | Specialized early detection service: FETZ Cologne  Observational study  % response: 51% of initial sample of n=482 | N=246  Age: 24.9±6.0 yrs. (15-39 yrs.);  18% minors (7.3%)  Assigned age group: ADULT  male: 63.0%  Co-morbidities: 64.6% any axis-I disorder incl. 30.9% depressive disorders | SPI-A and  SIPS 3.0  COGDIS: n=157 (63.8%)  APS: n=157 (63.8%)  BIPS: n=22 (8.9%)  GRFD: n=0 (0%)  none: n=52 (21.1%) | ≤4 yrs. (min. 1 yr.)  Missing observations:  1 yr.: 0%  2 yrs.: n=11 (4.5%)  3 yrs.: n=31 (12.6%)  4 yrs.: n=57 (23.2%) | 4 yrs. total sample: n=81 (32.9%)  4 yrs. CHR sample: n=75 (38.7%)  Annual hazard rates:  1 yr. only COGDIS: 0.11  1 yr. only UHR: 0.28  1 yr. UHR+COGDIS: 0.36  2 yrs. only COGDIS: 0.14  2 yrs. only UHR: 0.28  2 yrs. UHR+COGDIS: 0.53  3 yrs. only COGDIS: 0.23  3 yrs. only UHR: 0.28  3 yrs. UHR+COGDIS: 0.61  4 yrs. only COGDIS: 0.23  4 yrs. only UHR: 0.28  4 yrs. UHR+COGDIS: 0.66 | Conversion according to DSM-IV using SCID-I  Schizophrenia: 75.3%  Schizophreniform disorder: 3.7%  Schizoaffective disorder: 1.2%  Delusional disorder: 6.2%  Substance-induced psychosis: 4.9%  **All non-affective psychosis: 91.4%**  Depression with psychotic features: 3.7%  Bipolar disorder with psychotic features: 4.9%  **All affective psychosis: 8.6%** |
| **[87]**  Bechdolf et al. 2012 [23]  German Research Network on Schizophrenia study;  project 1.1.2  **GE: 2+** | Mixed, centres with and without specialized early detection services included.    Intervention study: integrated psychological intervention vs. supportive counselling  % response: 76% of eligible sample (128 of 168) | N=65 of supportive counselling condition  Age: 26.8±6.2yrs (18-40 yrs.)  Assigned age group: ADULT  % male: 64.6%  Co-morbidities: Not reported | ERIraos  COPER: n=64 (98.5%)  GRFD: n=21 (32.3%)  Note: APS and BLIPS were exclusion criteria at baseline, and, at follow-up, additional conversion criteria | 2 yrs.  Missing observations:  1 yr.: n=8 (12.3%)  2 yrs.: n=16 (24.6%) | 1 yr.: n=9 (13.8%)  2 yrs.: n=10 (15.4%)  Additional conversion to an BLIPS/APS defined CHR state:  1 yr.: n=2 (3.1%)  2 yrs.: n=3 (4.6%) | Conversion assessed with PANSS: any positive psychotic symptom in psychotic intensity for >7days  Schizophrenia/  Schizophreniform disorder: 80%  Psychosis: 20%  **All non-affective psychosis: 100%** |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **[88]**  Koutsouleris et al. 2009 [24]  **GE: 2+** | Specialized early detection service: Early Detection and Intervention Centre for Mental Crises, Ludwig-Maximilians-University  Observational study  % response: Not reported | N=45  Age: 25.1±5.8 yrs. (minimum age: 18 yrs.)  Assigned age group: ADULT  % male: 62.2%  Co-morbidities: Not reported | BSABS and  CAARMS (before 2006 version)  COPER and/or GRFD: n=20 (44.4%)  APS and/or BLIPS: n=25 (55.6%)  COPER: n=41 (91.1%)  APS: n=20 (44.4%)  BLIPS: n=17 (37.8%) | 4 yrs.  Missing observations:  4 yrs.: n=12 (26.7%) | 4 yrs.: n=14 (31.1%)  *Note*: annual and single criteria rates below include n=1 conversion to ICD-10 schizotypal disorder and were therefore not considered in respective moderator analyses  1 yr.: n=13(2.8%)  2 yrs.: n=14 (31.1%)  3 yrs.: n=15 (33.3%)  COPER: n=13 (31.7%)  APS: n=12 (60.0%)  BLIPS: n=8 (47.1%) | Conversion according to ICD-10  Schizophrenia: 71.4%  Schizoaffective disorder: 28.6%  **All non-affective psychosis: 100%** |
| **[89]**  Schultze-Lutter et al. 2007 [25]  **GE: 2+** | Specialized early detection service: FETZ Cologne  Observational study  % response: Not reported | N=146  Age: 24.4±5.2 yrs. (16-39 yrs.)  Assigned age group: ADULT  % male: 69.2%  Co-morbidities: Not reported | SPI-A  COPER: n=146 (100%) | 2 yrs.  Missing observations:  6 mths.: n=16 (11%)  1 yr.: n=24 (16.4%)  2 yrs.: n=38 (26.0%) | 2 yrs.: n=48 (32.9%)  6 mths.: n=23 (15.8%)  1 yr.: n=36 (24.7%)  Of additional n=3, conversion after 2 yrs. became known: (overall:n=51 (34.9%)) | Conversion assessed with PANSS: any positive psychotic symptom in psychotic intensity for >7days  Schizophrenia: 82.4%  Schizophreniform disorder: 7.8%  Schizoaffective disorder: 3.9%  Delusional disorder: 3.9%  **All non-affective psychosis: 98%**  Depression with psychotic features: 2%  **All affective psychosis: 2%** |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **[90,91]**  Bodatsch, Ruhrmann et al. 2011 [26]; Ruhrmann et al. 2007 [27]    German Research Network on Schizophrenia study; project 1.1.3  **GE: 2+** | Mixed, centres with and without specialized early detection services included.    Observation of the control group of an intervention study  % response in 2007 [27]: 32.5% (n=124 in both intervention groups) of eligible sample (n=382) | N=62  Age: 24.8±6.0 yrs. (18-40 yrs.)  Assigned age group: ADULT  % male: 66.1%  Co-morbidities: Not reported | ERIraos  APS and/or BLIPS: 100% | 2 yrs.  Missing observations:  only cases included in analyses with conversion within or follow-up until 2 yrs. | 2 yrs.: n=25 (40.3%) | Assessment: SCID-I psychosis section  Schizophrenia: 92%  Schizophreniform disorder: 4%  Delusional disorder: 4%  **All non-affective psychosis: 100%** |
| **United Kingdom** | | | | | | |
| **[94]**  Fusar-Poli et al. 2013 [28]  **GE: 2+** | Specialized early detection service: Outreach and support in SOUTH London (OASIS)  Observational study  % response: Not reported | N=290  Age: 22.9±4.61 yrs. (14-35 yrs.)  Assigned age group: ADULT  % male: 56.1%  Co-morbidities: 14% anxiety disorders, 29% depressive disorders, 8% personality disorders, 13% substance use disorders, 3% OCD, 5% other disorders | CAARMS 2006 and  SPI-A  APS: n=258 (89%)  BIPS: n=52 (18%)  GRFD: n=41 (14%)  COGDIS (since 2008): not reported | ≤10 yrs.  Missing observations:  Not reported | 4 yrs.: n=44 (15.2%)  Mean time to conversion:  375 days (95% CIs 280; 470 days), last observed conversion at 1242 days (~3.5 yrs) | Conversion: Positive symptom according to CAARMS for >1 day  Diagnoses: Not reported |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **[95,96]**  Morrison et al. 2004, 2007 [29,30]  Early Detection and Intervention Evaluation (EDIE I) trial  **GE: 2+** | No specialized early detection service,  referrals by a variety of clinical institutions  Intervention study: CT vs. treatment-as-usual (TAU)  % response: 95.2% of eligible sample (n=63) was randomized (n=60) | N=23 of TAU condition  Age: 21.5±5.2 yrs. (16-36 yrs.)  Assigned age group: MIX  % male: 82.6%  Co-morbidities: Not reported | PANSS  In total sample (n=60)  APS: n=48 (80%)  BLIPS: n=6 (10%)  GRFD: n=4 (6.7%) | 1-3 yrs.  Missing observations:  1 yr.: n=7 (30.4%)  3 yrs.: n=13 (56.5%) | 1 yr.: n=6 (26.1%)  3 yrs.: n=7 (30.4%) | Conversion according to DSM-IV  Schizophrenia: 71.4%  Schizoaffective disorder: 14.3%  Other psychotic DSM-IV disorder: 14.3%  **All non-affective psychosis: 100%** |
| **[97,98]**  Morrison et al. 2011, 2012 [31,32]  Early Detection and Intervention Evaluation (EDIE-2) trial  **GE: 2+** | Mixed, centres with and without specialized early detection services included.  Intervention study: CT vs. monitoring  % response: 100% of eligible sample of n=288 | N=144 of monitoring condition  Age: 20.8±4.5 yrs. (14-35 yrs.)  Assigned age group: MIX  % male: 63.2%  Co-morbidities of total sample (n=288): 67% ≥1 DSM-IV diagnosis: 41.3% depressive disorders, 19.9% panic disorders with / without agoraphobia, 11.2% social phobia, 10.9% specific phobia, 8.6% generalized anxiety disorder, 7.5% OCD, 2.2% PTSD | CAARMS (before 2006 version)  Only distribution of total sample (n=288)  APS: n=266 (92.4%)  BLIPS: n=7 (2.4%)  GRFD: n=33 (11.5%) | 1-2 yrs.  Missing observations:  1 yr.: n=51 (35.4%)  2 yrs.: n=65 (45.1%) | 1 yr.: n=10 (6.9%)  2 yrs.: n=13 (9.2%) | Conversion according to CAARMS or reports from family doctors  In total sample (n=23 conversions):  Schizophrenia: 34.8%  Schizoaffective disorder: 21.7%  Delusional disorder: 13%  Psychosis NOS: 13%  Brief psychotic disorder: 4.3%  **All non-affective psychosis: 100%** |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **The Netherlands** | | | | | | |
| **[57]**  Ziermans et al. 2011 [33]  **GE: 2+** | No specialized early detection service:  Department of Child and Adolescent Psychiatry, University Medical Centre Utrecht  Observational study  % response: Not reported | N=72  Age: 15.3±1.9 yrs. (12-18 yrs.)  Assigned age group: CAD  % male: 61.1%  Co-morbidities: 64.6% any DSM-IV axis-I disorder, 30.9% depressive disorders | SIPS 3.0 and  SPI-A (brief)  APS: n=65 (90.3%)  BLIPS: n=4 (5.6%)  GRFD: n=3 (4.2%)  COGDIS: n=39 (54.2%)  UHR+COGDIS: n=32 (44.4%) | 2 yrs.  Missing observations:  1 yr.: n=10 (13.9%)  2 yrs.: n=14 (19.4%) | 1 yr. overall: n=7 (9.7%)  2 yrs. overall: n=9 (12.5%)  2 yrs. APS: n=9 (13.8%)  2 yrs. COGDIS: n=7 (18.0%)  2 yrs. BLIPS: n=1 (25.0%)  2 yrs. GRFD: n=1 (33.3%)  2 yrs. UHR+COGDIS: n=7 (21.9%) | Conversion according to SIPS  Schizophrenia: 66.7%  Schizoaffective disorder: 11.1%  Psychosis NOS: 11.1%  **All non-affective psychosis: 88.9%**  Bipolar I disorder with pscchotic features: 11.1%  **All affective psychosis: 11.1%** |
| **[92]**  Velthorst et al., 2013 [34]  Dutch Prediction of Psychosis Study (DUPS)  **GE: 2+** | Mixed: Specialized early detection service at the Adolescent Clinic of the Academic Medical Centre (AMC) , University of Amsterdam and Department of Child and Adolescent Psychiatry, University Medical Centre Utrecht  Observational study  % response: Not reported | N=148  Age: 17.2±3.8 yrs. (11-29 yrs.)  Assigned age group: YOUTH  % male: 64.2%  Co-morbidities: Not reported | SIPS 3.0 and  SPI-A (brief)  APS: n=133 (89.9%)  BLIPS: n=10 (7%)  GRFD: n=6 (4%)  COGDIS: n=55 (37%) | 2 yrs.  Missing observations:  2 yrs.: n=46 (31.1%) | 2 yrs.: n=28 (18.9%) | Conversion: Positive symptom according to PANSS at psychotic intensity >7 days  Diagnoses: Not reported |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| --- | --- | --- | --- | --- | --- | --- |
| **[93]**  van der Gaag et al. 2012 [35]  Dutch Early Detection and Intervention Evaluation (EDIE-NL) trial  **GE: 2+** | Mixed, centres with and without specialized early detection services included. Four sites in the Netherlands recruited participants.  Intervention study: CBT vs. TAU  % response: 66.5% of eligible sample (n=30) were randomized (n=201) | N=103 of TAU condition  Age: 22.6±5.5 yrs (14-35 yrs.)  Assigned age group: MIX  In total sample (n=201): % male: 48.5%  Co-morbidities of total sample (n=201): 31.3% anxiety, 30.8% depressive, and 7.5% personality disorders, 6.5% ADHD, 6.0% substance-use disorders, 5.0% PTSD, 3.0% oppositional defiant disorder, 2.5% Asperger | CAARMS  (2006 version)  Distribution in total sample (n=201)  APS: n=164 (81.6%)  BLIPS: n=3 (1.5%)  GRFD: n=34 (16.9%) | 1.5 yrs.  Missing observations:  1.5 yrs.: n=13 (17.3%) | 6 mths.: n=14 (13.4%)  1 yr.: n=20 (19.4%)  1.5 yrs.: n=22 (21.4%) | Conversion according to CAARMS  Diagnoses in total sample (n=32 conversions):  Schizophrenia: 65.6%  Schizoaffective disorder: 3.1%  Brief psychotic disorder: 3.1%  Psychosis NOS: 9.4%  **All non-affective psychosis: 81.2%**  Depression with psychotic features: 12.5%  Bipolar disorder with psychotic features: 6.3%  **All affective psychosis: 18.8%** |
| **Finland** | | | | | | |
| **[101]**  Manninen et al. 2013 [36]  **GE: 2-** | No specialized early detection service. Reform school  Observational study  % response: 83.9% of 62 eligible residents | N=52  Age: 15-18 yrs.  Assigned age group: CAD  % male: 62.3%  Co-morbidities: 23.1% with mood disorder, 34.6% with conduct disorder, 9.6% with substance use, 7.8% with attention disorder | SIPS  APS: n=7 (13.5%)  BLIPS: 0%  GRFD: 0%  None: n=45 (86.5%) | 5 yrs.  Missing observations:  0% | All: n=4 (7.8%)  APS: n=1 (14.3%)  None: n=3 (6.7%); 2 substance-induced | Psychiatric baseline and outcome diagnoses (ICD-10) were obtained from the Finnish Hospital Discharge Register  Note: Converters might not have sought help after conversion or been treated as outpatients and, consequently, might not show in hospital registers  Diagnoses: Not reported |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| --- | --- | --- | --- | --- | --- | --- |
| **[102]**  Lindgren et al. 2014 [37]  Helsiniki Prodromal Study  **GE: 2+** | No specialized early detection service. Adolescent psychiatric patients in Helsinki  Observational study  % response: 75.0% of 145 invited patients (n=232) completed study protocol (n=174); n=14 excluded for past or present psychosis | N=161  Age: 16.6±0.9 yrs. (15-18 yrs.)  Assigned age group: CAD  % male: 33.5%  Co-morbidities: 75.8% mood disorders, 31.7% anxiety disorders, 9.3% eating disorders, 14.3% substance-use disorders, 13.7% disorders usually diagnosed in infancy, childhood, or adolescence | SIPS  UHR: n=54 (33.5%)  APS: n=53 (98.1%)  BLIPS: 0%  GRFD: n=3 (5.6%)  None: n=107 (66.5%) | 1 yr.  Missing observations:  8.1% for conversion status | Overall: n=3 (5.7%)  APS: n=3 (5.7%)  GRFD: 0%  None: n=2 (1.9%) | Conversion according to SIPS and/or medical records  Psychosis NOS: 80%  **All non-affective psychosis: 80%**  Depression with psychotic features: 20%  **All affective psychosis: 20%** |
| **Switzerland** | | | | | | |
| **[99]**  Riecher-Rössler et al. 2009 [38]  **GE: 2+** | Specialized early detection service: FEPSY Early Detection Clinic At the University Psychiatric Outpatient Department, Basel  Observational study  % response: 60.4% of eligible sample (n=106) | N=64  Age: 26.5±8.6 yrs. (minimum age: 18 yrs.)  Assigned age group: ADULT  % male: 59.4%  Co-morbidities: Not reported | BSIP  Of 53 with follow-up:  APS or BLIPS: n=37 (69.8%)  Genetic risk: n=2 (3.7%)  APS or BLIPS and genetic risk: n=10 (18.9%)  Unspecific risk: n=4 (7.6%) | Up to 7 yrs. (mean 5.4 yrs.)  Missing observations:  7 yrs.:n=11 (17.2%) | 1 yr.: n=15 (28.3%)  2 yrs.: n=19 (35.8%)  3 yrs.: n=20 (37.7%)  > 3 yrs.: n=21 (39.6%) | Conversion according to BPRS  Diagnoses: Not reported |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| --- | --- | --- | --- | --- | --- | --- |
| **[100]**  Simon et al. 2012 [39]  **GE: 2+** | Specialized early detection service: Bruderholz Early Psychosis Service  Observational study  % response: Not reported | N=148  Age: 14-40 yrs.  UHR: 20.4±5.2 yrs.  COPER: 21.7±4.2 yrs.  none: 21.6±5.0 yrs.  Assigned age group: MIX  % male: 67.6%  Co-morbidities in CHR sample: 65.7% mood/anxiety disorders, 8.1% adjustment disorder, 6.1% dissociative disorder | SIPS 3.0 and SPI-A  any CHR: n=99 (66.9%)  any UHR: n=73 (49.3%)  APS: n=68 (46.0%)  BLIPS: n=3 (2.0%)  GRFD: n=2 (1.4%)  COPER (UHR criteria excluded): n=26 (17.6%)  none: n=49 (33.1%) | 1-2 yrs.  (mean 670 days)  Missing observations:  UHR  1 yr.: n=17 (23.3%)  2 yrs.: n=40 (54.8%)  COPER  1 yr.: n=11 (42.3%)  2 yrs.: n=10 (38.5%)  none  1 yr.: n=23 (46.9%)  2 yrs.: n=31 (63.3%) | all CHR:  1 yr.: n=7 (12.5%)  2 yrs.: n=10 (23.8%)  UHR, 1 yr.: n=7 (9.6%)  UHR, 2 yrs.: n=10 (13.7%)  APS, 1 yr.: n= 7 (10.3%)  APS, 2 yrs.: n=10 (14.7%)  all other CHR criteria: 0% | Conversion according to SIPS  Schizophrenia: 90%  **All non-affective psychosis: 90%**  **All affective psychosis: 10%** |
| **Multiple or other European countries** | | | | | | |
| **[103]**  Ruhrmann et al. 2010 [40]; Salokangas et al. 2012 [41]  European Prediction of Psychosis Study (EPOS) incl. Germany, Finland, UK and the Netherlands  **GE: 2+** | Mixed, centres with and without specialized early detection services included.  Observational study  % response: 48% of eligible sample (n=513) | N=245  Age: 23.0±5.2yrs. (16-35 yrs.)  Assigned age group: ADULT  % male: 55.9%  Co-morbidities: 62.0% any and 22.4% even 2-3 current axis-I disorders; 39.2% anxiety disorder, 34.3% unipolar depressive disorders, 4.1% bipolar disorders, 6.5% somatoform disorders, 3.2% other disorders | SPI-A (brief) and  SIPS (3.0 with modified GRFD)  Only COGDIS: 25 (10.2%)  Only UHR: 74 (30.2%)  COGDIS+UHR: 146 (59.6%) | 1.5 yrs.  Missing observations:  1.5 yrs.: n=62 (25.3%) | 1.5 yrs.: n=37 (15.1%)  1.5 yrs. only COGDIS: 5%  1.5 yrs. only UHR: 18%  1.5 yrs. COGDIS+UHR: 22% | Conversion assessed with SIPS: any  positive item = 6 for >7 days  Schizophrenia: 62.2%  Schizophreniform disorder: 8.1%  Brief psychotic disorder: 5.4%  Schizoaffective disorder: 8.1%  **All non-affective psychosis: 83.8%**  Mood disorder with psychotic features: 16.2%  **All affective psychosis: 16.2%** |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
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| **[104]**  Amminger et al. 2010 [42]  **GE: 2+** | No specialized early detection service: First episode psycho-sis detection unit of the Department of Child and Adolescent Psychiatry, Vienna, Austria  Intervention study: Omega-3 fatty acids vs. placebo  % response: 76.4% of eligible sample (n=106) were randomized (n=81) | N=40 of placebo condition  Age: 16.0±1.7 yrs. (13-25 yrs.)  Assigned age group: CAD  % male: 32.5%  Co-morbidities: Not reported | PANSS  APS: n=22 (55.0%)  BLIPS: n=3 (7.5%)  GRFD: 0%  APS+BLIPS: n=13 (32.5%)  APS+GRFD: n=2 (5.0%) | 1 yr.  Missing observations:  1 yr.: n=2 (5.0%) | 1 yr.: n=11 (27.5%) | Conversion according to BPRS and PANSS  Schizophrenia: 72.7%  Schizophreniform disorder: 9.1%  Schizoaffective disorder: 9.1%  **All non-affective psychosis: 90.9%**  Bipolar I disorder with psychotic features: 9.1%  **All affective psychosis: 9.1%** |
| **[105]**  Fusar-Poli et al. 2012 [43]  **GE: 2+** | Specialized early detection service:  Programma 2000, Milan, Italy  Observational study  % response: Not reported | N=40  Age: 20.7±5.3 yrs. (15-35 yrs.)  Assigned age group: MIX  % male: 47.5%  Co-morbidities: Not reported | CAARMS (Italian translation)  APS: n=36 (90%)  BLIPS: n=1 (2.5%)  GRFD: n=3 (7.5%) | 1 yr.  Missing observations:  0% | 1 yr.: n=9 (22.5%) | Conversion according to CAARMS  Diagnoses: Not reported |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| --- | --- | --- | --- | --- | --- | --- |
| **[106]**  Lemos-Giráldez et al. 2009 [44]  **GE: 2-** | Specialized early detection service: Prevention program for psychosis (P3), Hospital Sierrallana, Torrelavega, Spain  Observational study  Various recruitment sources incl. website, no participant was help-seeking  % response: Not applicable, only contact with persons willing to participate | N=61  Age: 21.7±3.8 yrs. (15-31 yrs.)  Assigned age group: ADULT  % male: 65.6%  Co-morbidities: Not reported | SIPS 3.0  APS: n=52 (85.2%)  BLIPS: n=3 (4.9%)  GRFD: n=6 (9.8%) | 3 yrs.  Missing observations:  3 yrs.: n=16 (26.2%) | 1 yr.: n=11 (18.0%)  3 yrs.: n=14 (23.0%) | Conversion according to SIPS  Schizophrenia: 78.6%  Schizophreniform disorder: 7.1%  Substance-induced psychosis: 14.3%  **All non-affective psychosis: 100%**  Converters significantly older at baseline. |
| **[107]**  Kiss et al. 2012 [45]; Letter to the Editor  **GE: 2+** | No specialized early detection service. Outpatient units of the University of Szeged, Bács-Kiskun Country Hospital, Kecskemét, & National Psychiatry Center, Semmelweis University, Budapest, Hungary  Observational study  % response: Not reported | N=97  Age: Not reported  No age group assignment.  Gender: Not reported  Co-morbidities: Not reported | CAARMS (before 2006 version)  UHR: n=97 (100%) | 1 yr.  Missing observations:  Not reported | 1 yr.: n=31 (32.0%) | Conversion according to CAARMS  Psychotic disorders (schizophrenia, schizophreniform disorder, psychotic mood disorder): 100% |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| --- | --- | --- | --- | --- | --- | --- |
| **[108]**  Kotlicka-Antczak et al. 2014 [46]; Brief report  **GE: 2+** | Specialized early detection service: Programme of Recognition and Therapy (PORT), Central Clinical Hospital of Lodz, Poland  Observational study  % response: Not reported | N=81  Age: 15-29 yrs.  Assigned age group: MIX  Gender: Not reported  Co-morbidities: Not reported | CAARMS 2006 version  UHR: n=81 (100%) (all plus functional decline within past 12 mths.) | ≤3 yrs.  Missing observations:  3 yrs.: n=16 (19.7%) | Overall: n=15 (18.5%) | Conversion according to CAARMS  Diagnoses: Not reported |
| **Asian countries** | | | | | | |
| **[109]**  Lam et al. 2006 [47]  **GE: 2+** | Specialized early detection service: Early Assessment Service for Young People with psychosis (EASY), Hong-Kong, China  Observational study  % response: 92.5% of eligible sample (n=67) | N=62  Age: 16.2±3.7 yrs. (6.9-23.5 yrs.)  Assigned age group: YOUTH  % male: 58.1%  Co-morbidities: 93.5% had a non-psychotic DSM-IV diagnosis, 6.5% were diagnosed with brief psychosis or substance-use psychosis due to BLIPS | CAARMS (before 2006 version) and PANSS  APS: n=51 (82.2%)  BLIPS: n=12 (19.4%)  GRFD: n=12 (19.4%) | 6 mths.  Missing observations:  n=9 (14.5%) | 3 mths.: n=16 (25.8%)  6 mths.: n=18 (29.0%) | Conversion according to CAARMS  Schizophreniform disorder: 61.1%  Schizoaffective disorder: 11.1%  Psychosis NOS: 16.6%  **All non-affective psychosis: 88.8%**  Bipolar disorder with psychotic features: 5.6%  Depression with psychotic features: 5.6%  **All affective psychosis: 11.2%** |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | | **Follow-up & missing observations per follow-up (cumulative)** | | **Annual conversion rate** | | **Conversion assessment & diagnoses** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[113]**  Zhang et al. 2014 [48]  **GE: 2+** | No specialized early detection service: Shanghai Psychotherapy and Psychological Counselling Centre (SPCC), China  Observational study  % response: 82.3% of invited screening positives on the PQ-B (n=1681) were interviewed (n=1384) | N=89  Age: 25.89±7.54 yrs. (15-45 yrs.)  Assigned age group: ADULT  % male: 50.6%  Co-morbidities: 24.7% mood or anxiety disorder, 3.4% stress related disorder, 7.9% other disorder or not yet determined | SIPS 3.0  APS: n=65 (73%)  BLIPS: n=3 (3.4%)  GRFD: n=25 (28.1%) | | 2 yrs.  Missing observations:  2 yrs.: n=36 (40.5%) | | 2 yrs.: n=14 (15.7%) | | Conversion according to SIPS  Schizophrenia: 85.7%  Other psychotic disorder according to POPS: 14.3%  **All non-affective psychosis: 85.7%-100%** | |
| **[110]**  Lee et al. 2013 [49]  **GE: 2+** | No specialized early detection service: Longitudinal Youth At-Risk Study (LYRIKS), Singapore  Observational study of both help-seeking and non-help-seeking persons  % response: 39.1% of invited persons (n=2368) agreed to assessment (n=926); n=667 were accepted into the study | N=667  Age: UHR: 21.3±3.5 yrs.;  none: 21.7±3.4 yrs. (14-29 yrs.)  Assigned age group: ADULT  % male: 60.1%  Co-morbidities:  in UHR: 78.0% any axis-I; 65.3% mood, and 22.5% anxiety disorders, 11.0% OCD, 19.6% substance-use disorders, 5.8% adjustment disorders incl. PTSD  in none: 18.8% any axis-I disorder; 12.2% mood, and 3.4% anxiety disorders, 1.8% OCD, 5.1% substance-use disorders, 1.2% adjustment disorders incl. PTSD | | CAARMS (before 2006 version)  UHR: n=173 (25.9%) of these 76.3% help-seekers  APS: n=144 (83.7%)  BLIPS: n=6 (3.5%)  GRFD: n=49 (28.5%)  none: n=494 (74.1%) of these 14.2% help-seekers | | 6 mths.  Missing observations:  none; 2 yrs.: n=148 (30.0%)  UHR; 2 yrs.: 0% | | 6 mths., UHR: n=6 (3.5%)  6 mths., none: 0% | | Conversion according to PANSS and SCID  Diagnoses: Not reported | |

| **Study,**  **GE** | **Setting & response/ participation rate** | **Sample characteristics**  **(size, age, gender, co-morbidities)** | **Assessment and baseline distribution of CHR criteria** | **Follow-up & missing observations per follow-up (cumulative)** | **Annual conversion rate** | **Conversion assessment & diagnoses** |
| --- | --- | --- | --- | --- | --- | --- |
| **[111]**  Katsura et al. 2014 [50]  **GE: 2+** | Specialized early detection service: Sendai ARMS and first-episode (SAFE) clinic, Sendai, Japan  Observational study  % response: 95.5% of eligible sample (n=111) | N=106  Age: 20.0±4.3 yrs.  (14-35 yrs.)  Assigned age group: MIX  % male: 37.7%  Co-morbidities: Not reported | CAARMS (before 2006 version)  APS: n=99 (93.4%)  BLIPS: n=4 (3.8%)  GRFD: n=3 (2.8%) | ≤7.4 yrs.  (mean=3.2 yrs.; Mdn=2.7 yrs.; min. 1 yr.)  Missing observations:  1 yr.: n=23 (21.7%)  >1 yr.: Not reported | Overall: n=14 (13.2%)  1 yr.: n=10 (9.4%)  2 yrs.: n=13 (12.3%)  3 yrs.: n=14 (13.2%)  APS: n=12 (18.3%)  BLIPS: n=2 (50.0%)  GRFD: 0% | Conversion according to CAARMS  Schizophrenia: 57.1%  Schizophreniform disorder: 7.1%  Delusional disorder: 7.1%  Psychosis NOS: 28.6%  **All non-affective psychosis: 100%** |
| **[112]**  Koike et al. 2013 [51]  **GE: 2+** | No specialized early detection service: Outpatient and inpatient units of the University of Tokyo Hospital, Japan  Observational study  % response: 74% of eligible sample (n=50) | N=37  Age: 21.3±3.6 yrs. (15-30 yrs.)  Assigned age group: ADULT  % male: 54.1%  Co-morbidities: Not reported | SIPS  APS: n=32 (86.5%)  BLIPS: n=3 (8.1%)  GRFD: n=10 (27%) | 2 yrs.  Missing observations:  6 mths.: n=10 (27.0%)  12 mths.: n=13 (37.1%)  24 mths.: n=20 (54.1%) | Overall: n=6 (16.2%)  6 mths.: n=2 (5.4%)  12 mths.: n=2 (5.4%)  24 mths.: n=6 (16.2%) | Conversion according to SIPS  Diagnoses: Not reported |
| **[114]**  Kim et al. 2012 [52]  **GE: 2+** | Specialized early detection service: Seoul Youth Clinic, South Korea  Observational study  % response: Not reported | N=78  Age: 21.3±4.2 yrs.  Assigned age group: MIX  % male: 87.2%  Co-morbidities: 61% mood disorders, 17% anxiety disorders, 3% other disorders | CAARMS (before 2006 version)  APS: n=71 (91%)  BLIPS: n=1 (1.3%)  GRFD: n=13 (16.7%) | ≤7 yrs.  (mean time to conversion: 412 days; 32-1127 days)  Missing observations:  Overall: n=11 (14.1%) | Overall: n=14 (20.9%)  APS: n=13 (18.3%)  BLIPS: n=1 (100%)  GRFD: n=1 (7.7%) | Conversion according to DSM-IV  Schizophrenia: n=10  **All non-affective psychosis: 71.4%**  Bipolar I with psychotic features: n=4  **All affective psychosis: 28.6%** |

# **S.4. Supplementary Table 2**

STable 2 Effect sizes (*Ei*, or )at different follow-ups *tx* in samples meeting COPER, single UHR criteria (each irrespective of the potential presence of other CHR criteria) or certain UHR-COGDIS combinations as well as in CHR-negative samples

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Study** | ***tx*** | **N** | ***Ei*, or** | **95% CIs** | ***Q (df)*** | ***I*2** | ***z*** |
| **Cognitive-perceptive basic symptoms (COPER)** | | | | | | | |
| [25] 6,a | 6 mth. | 146 | 0.158 | 0.129; 0.187 |  |  |  |
| [25] 6,a | 1 yr. | 146 | 0.247 | 0.212; 0.282 |  |  |  |
| [20] 5,a | 1 yr. | 106 | 0.198 | 0.160; 0.236 |  |  |  |
| [23] 4,a | 1 yr. | 64 | 0.139 | 0.097; 0.181 |  |  |  |
| [39] 6,b | 1 yr. | 26 | 0 # | 0; 0 |  |  |  |
| **pooled** | **1 yr.** |  | **0.144** | **0.072; 0.215** | **81.169 (3)** | **96.3%** | **1.976\*** |
| [25] 6,a | 2 yrs. | 146 | 0.329 | 0.291; 0.367 |  |  |  |
| [20] 5,a | 2 yrs. | 106 | 0.368 | 0.322; 0.414 |  |  |  |
| [23] 4,a | 2 yrs. | 64 | 0.154 | 0.110; 0.198 |  |  |  |
| [39] 6,b | 2 yrs. | 26 | 0 # | 0; 0 |  |  |  |
| **pooled** | **2 yrs.** |  | **0.211** | **0.107; 0.315** | **142.066 (3)** | **97.9%** | **1.989\*** |
| [20] 5,a | 3 yrs. | 106 | 0.500 | 0.452; 0.548 |  |  |  |
| [20] 5,a | 4 yrs. | 106 | 0.557 | 0.510; 0.604 |  |  |  |
| [20] 5,a | >4 yrs. | 106 | 0.651 | 0.606; 0.696 |  |  |  |

Note: Attenuated and transient psychotic symptoms, and UHR criteria, respectively, were excluded in [23] and [39].

Upper number indicates scale used for the assessment of CHR criteria (4: ERIraos; 5: BSABS; and 6: SPI-A)

Upper small letter indicates age group of sample (a: ADULT; b: MIX; c: YOUTH; and d: CAD)

F: according to fixed-effects model

\* *z* > 1.96: significant on 5% level; \*\* *z* > 2.58: significant on 1% level

# Because inclusion of extreme *Ei* values, i.e., 0 or 1, would cause an undue division by 0 in the calculation of or , 0 was replaced by 0.001 and 1 by 0.999 in their calculation.

STable 2 cont. (1)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Study** | ***tx*** | **N** | ***Ei*, or** | **95% CIs** | ***Q (df)*** | ***I*2** | ***Z*** |
| **Respective examined clinical high risk criteria not fulfilled (CHR-negative)** | | | | | | | |
| [22] 1+6,a;UHR/COGDIS | 6 mth. | 52 | 0.019 | -0.001; 0.039 |  |  |  |
| [49] 2,a;UHR | 6 mth. | 494 | 0 # | 0; 0 |  |  |  |
| [7,8] 2,c;UHR | 6 mth. | 173 | 0.006 | 0.000; 0.011 |  |  |  |
| **pooled F** | **6 mth.** |  | **<0.001** | **-0.0002; 0.0002** | **2.020 (2)** | **1.0%** | **0.148** |
| [22] 1+6,a;UHR/COGDIS | 1 yr. | 52 | 0.038 | 0.012; 0.064 |  |  |  |
| [39] 1,b;UHR/COPER | 1 yr. | 49 | 0 # | 0; 0 |  |  |  |
| [37] 1,d;UHR | 1 yr. | 107 | 0.019 | 0.005; 0.033 |  |  |  |
| **pooled F** | **1 yr.** |  | **0.001** | **-0.001; 0.003** | **3.650 (2)** | **45.2%** | **0.394** |
| [22] 1+6,a;UHR/COGDIS | 2 yrs. | 52 | 0.077 | 0.040; 0.114 |  |  |  |
| [39] 1,b;UHR/COPER | 2 yrs. | 49 | 0 # | 0; 0 |  |  |  |
| [7,8] 2,c;UHR | 2 yrs. | 173 | 0.012 | 0.004; 0.020 |  |  |  |
| **pooled** | **2 yrs.** |  | **0.009** | **<0.001; 0.017** | **6.297 (2)** | **68.2%** | **0.994** |
| [22] 1+6,a;UHR/COGDIS | 3 yrs. | 52 | 0.115 | 0.071; 0.159 |  |  |  |
| [22] 1+6,a;UHR/COGDIS | 4 yrs. | 52 | 0.115 | 0.071; 0.159 |  |  |  |
| [22] 1+6,a;UHR/COGDIS | >4 yrs. | 52 | 0.154 | 0.105; 0.203 |  |  |  |
| [36] 1,d;UHR | >4 yrs. | 45 | 0.067 | 0.030; 0.104 |  |  |  |
| **pooled F** | **>4 yrs.** |  | **0.098** | **0.069; 0.128** | **1.941 (1)** | **48.5%** | **3.279\*\*** |

Upper number indicates scale used for the assessment of CHR criteria (1: SIPS; 2: CAARMS; 3: CAARMS 2006 version; 4: other scale; 5: BSABS; and 6: SPI-A)

Upper small letter indicates age group of sample (a: ADULT; b: MIX; c: YOUTH; and d: CAD)

F: according to fixed-effects model

\* *z* > 1.96: significant on 5% level; \*\* *z* > 2.58: significant on 1% level

# Because inclusion of extreme *Ei* values, i.e., 0 or 1, would cause an undue division by 0 in the calculation of or , 0 was replaced by 0.001 and 1 by 0.999 in their calculation.

STable 2 cont. (2)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study** | ***tx*** | **N** | ***Ei*, or** | | **95% CIs** | ***Q (df)*** | ***I*2** | ***Z*** |
| **Attenuated psychotic symptoms (APS) criterion** | | | | | | | | |
| [5] 2,b | 6 mth. | 664 | 0.076 | 0.067; 0.085 | |  |  |  |
| [17] 1,a | 6 mth. | 24 | 0.125 | 0.059; 0.191 | |  |  |  |
| **pooled F** | **6 mth.** |  | **0.077** | **0.068; 0.086** | | **0.512 (1)** | **0%** | **8.189\*\*** |
| [39] 1,b | 1 yr. | 68 | 0.103 | 0.066; 0.140 | |  |  |  |
| [37] 1,d | 1 yr. | 53 | 0.057 | 0.026; 0.088 | |  |  |  |
| **pooled F** | **1 yr.** |  | **0.076** | **0.052; 0.100** | | **0.882 (1)** | **0%** | **3.154\*\*** |
| [39] 1,b | 2 yrs. | 68 | 0.147 | 0.103; 0.191 | |  |  |  |
| [33] 1,d | 2 yrs. | 65 | 0.138 | 0.096; 0.180 | |  |  |  |
| [52] 1,c | 2 yrs. | 71 | 0.183 | 0.138; 0.228 | |  |  |  |
| [14] 1,c | 2 yrs. | 65 | 0.262 | 0.208; 0.315 | |  |  |  |
| **pooled F** | **2 yrs.** |  | **0.174** | **0.151; 0.197** | | **3.704 (3)** | **19.0%** | **7.517\*\*** |
| [10] 2,b | 3 yrs. | 43 | 0.006 | 0.437; 0.587 | |  |  |  |
| [50] 1,b | 3 yrs. | 99 | 0.121 | 0.088; 0.154 | |  |  |  |
| [12] 1,c | 3 yrs. | 282 | 0.280 | 0.249; 0.311 | |  |  |  |
| **pooled** | **3 yrs.** |  | **0.291** | **0.205; 0.378** | | **27.012 (2)** | **92.6%** | **3.296 \*\*** |
| [15] 1,d | >4 yrs. | 101 | 0.149 | 0.115; 0.183 | |  |  |  |
| [36] 1,d | >4 yrs. | 7 | 0.143 | 0.013; 0.273 | |  |  |  |
| **pooled F** | **>4 yrs.** |  | **0.149** | **0.116; 0.181** | | **0.002 (1)** | **0%** | **4.435\*\*** |

Upper number indicates scale used for the assessment of CHR criteria (1: SIPS; 2: CAARMS; 3: CAARMS 2006 version; 4: other scale; 5: BSABS; and 6: SPI-A)

Upper small letter indicates age group of sample (a: ADULT; b: MIX; c: YOUTH; and d: CAD)

F: according to fixed-effects model

\* *z* > 1.96: significant on 5% level; \*\* *z* > 2.58: significant on 1% level

# Because inclusion of extreme *Ei* values, i.e., 0 or 1, would cause an undue division by 0 in the calculation of or , 0 was replaced by 0.001 and 1 by 0.999 in their calculation.

STable 2 cont.(3)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study** | ***tx*** | | **N** | | ***Ei*, or** | | **95% CIs** | ***Q (df)*** | | ***I*2** | ***Z*** |
| **Transient psychotic symptoms (BLIPS) criterion** | | | | | | | | | | | |
| [5] 2,c | 6 mth. | | 36 | | 0.133 | | 0.077; 0.189 |  | |  |  |
| [39] 1,b | 1 yr. | | 3 | | 0 # | | 0; 0 |  | |  |  |
| [52] 2,b | 2 yrs. | | 1 | | 1 # | | 0.606; 1.194 |  | |  |  |
| [14] 1,c | 2 yrs. | | 17 | | 0.588 | | 0.472; 0.704 |  | |  |  |
| [33] 1,d | 2 yrs. | | 4 | | 0.250 | | 0.038; 0.462 |  | |  |  |
| [39] 1,b | 2 yrs. | | 3 | | 0 # | | 0; 0 |  | |  |  |
| **pooled** | **2 yrs.** | |  | | **0.466** | | **0.188; 0.744** | **31.740 (3)** | | **90.5%** | **1.642** |
| [10] 2,c | 3 yrs. | | 23 | | 0.609 | | 0.509; 0.709 |  | |  |  |
| [50] 2,b | 3 yrs. | | 4 | | 0.500 | | 0.255; 0.745 |  | |  |  |
| [12] 1,c | 3 yrs. | | 7 | | 0.429 | | 0.246; 0.612 |  | |  |  |
| **pooled F** | **3 yrs.** | |  | | **0.518** | | **0.379; 0.656** | **5.421(2)** | | **63.1%** | **3.659\*\*** |
| **Genetic risk and functional decline (GRFD) criterion** | | | | | | | | | | | |
| [5] 2,c | | 6 mth. | | 209 | | 0.062 | 0.045; 0.079 | |  |  |  |
| [37] 1,d | | 1 yr. | | 3 | | 0 # | 0; 0 | |  |  |  |
| [39] 1,b | | 1 yr. | | 2 | | 0 # | 0; 0 | |  |  |  |
| **pooled F** | | **1 yr.** | |  | | **0** | **0; 0** | | **0 (1)** | **0%** | **Div/0** |
| [14] 1,c | | 2 yrs. | | 2 | | 0 # | 0; 0 | |  |  |  |
| [39] 1,b | | 2 yrs. | | 2 | | 0 # | 0; 0 | |  |  |  |
| [33] 1,d | | 2 yrs. | | 3 | | 0.333 | -0.511; 1.177 | |  |  |  |
| [52] 2,b | | 2 yrs. | | 13 | | 0.077 | 0.004; 0.150 | |  |  |  |
| **pooled F** | | **2 yrs.** | |  | | **0.019** | **-0.012; 0.050** | | **0.760 (3)** | **0%** | **0.588** |
| [10] 2,c | | 3 yrs. | | 19 | | 0.105 | 0.036; 0.174 | |  |  |  |
| [12] 1,c | | 3 yrs. | | 2 | | 0 # | 0; 0 | |  |  |  |
| [50] 2,b | | 3 yrs. | | 3 | | 0 # | 0; 0 | |  |  |  |
| **pooled F** | | **3 yrs.** | |  | | **0.014** | **-0.008; 0.037** | | **1.802 (2)** | **0%** | **0.637** |

Upper number indicates scale used for the assessment of CHR criteria (1: SIPS; 2: CAARMS; 3: CAARMS 2006 version; 4: other scale; 5: BSABS; and 6: SPI-A)

Upper small letter indicates age group of sample (a: ADULT; b: MIX; c: YOUTH; and d: CAD)

F: according to fixed-effects model

\* *z* > 1.96: significant on 5% level; \*\* *z* > 2.58: significant on 1% level

# Because inclusion of extreme *Ei* values, i.e., 0 or 1, would cause an undue division by 0 in the calculation of or , 0 was replaced by 0.001 and 1 by 0.999 in their calculation.

STable 2 cont.(4)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study** | ***tx*** | | **N** | | | | ***Ei*, or** | | **95% CIs** | | ***Q (df)*** | ***I*2** | | | ***Z*** | | |
| **Ultra-high risk (UHR) criteria *and/or* Cognitive disturbances (COGDIS)** | | | | | | | | | | | | | | | | | |
| [22] 1+6,a | | 6 mth. | | 194 | | | 0.149 | | 0.123; 0.175 |  | | |  | | | |  |
| [22] 1+6,a | | 1 yr. | | 194 | | | 0.258 | | 0.227; 0.289 |  | | |  | | | |  |
| [33] 1+6,d | | 1 yr. | | 72 | | | 0.097 | | 0.063; 0.131 |  | | |  | | | |  |
| **pooled** | | **1 yr.** | |  | | | **0.178** | | **0.099; 0.257** | **11.782 (1)** | | | **91.5%** | | | | **2.213\*** |
| [22] 1+6,a | | 2 yrs. | | 194 | | | 0.335 | | 0.301; 0.369 |  | | |  | | | |  |
| [40] 1+6,a | | 2 yrs. | | 245 | | | 0.151 | | 0.129; 0.173 |  | | |  | | | |  |
| [33] 1+6,a | | 2 yrs. | | 72 | | | 0.125 | | 0.087; 0.163 |  | | |  | | | |  |
| [34] 1+6,a | | 2 yrs. | | 148 | | | 0.189 | | 0.158; 0.220 |  | | |  | | | |  |
| **pooled** | | **2 yrs.** | |  | | | **0.199** | | **0.157; 0.242** | **23.380 (3)** | | | **87.2%** | | | | **4.596\*\*** |
| [22] 1+6,a | | 3 yrs. | | 194 | | | 0.371 | | 0.337; 0.405 |  | | |  | | | |  |
| [22] 1+6,a | | 4 yrs. | | 194 | | | 0.387 | | 0.353; 0.421 |  | | |  | | | |  |
| [24] 2+5,a | | 4 yrs. | | 45 | | | 0.311 | | 0.243; 0.379 |  | | |  | | | |  |
| **pooled F** | | **4 yrs.** | |  | | | **0.372** | | **0.341; 0.402** | **0.963 (1)** | | | **0%** | | | | **12.000\*\*** |
| [22] 1+6,a | | >4 yrs. | | 194 | | | 0.402 | | 0.368; 0.436 |  | | |  | | | |  |
| **Ultra-high risk (UHR) criteria *plus* Cognitive disturbances (COGDIS)** | | | | | | | | | | | | | | | | | |
| [22] 1+6,a | | 6 mth. | | | 127 | 0.165 | | 0.132; 0.198 | |  | | | |  | |  | |
| [22] 1+6,a | | 1 yr. | | | 127 | 0.299 | | 0.259; 0.339 | |  | | | |  | |  | |
| [22] 1+6,a | | 2 yrs. | | | 127 | 0.409 | | 0.366; 0.452 | |  | | | |  | |  | |
| [40] 1+6,a | | 2 yrs. | | | 146 | 0.171 | | 0.140; 0.202 | |  | | | |  | |  | |
| [33] 1+6,d | | 2 yrs. | | | 32 | 0.219 | | 0.148; 0.290 | |  | | | |  | |  | |
| **pooled** | | **2 yrs.** | | |  | **0.267** | | **0.185; 0.350** | | **19.727 (2)** | | | | **89.9%** | | **3.174\*\*** | |
| [22] 1+6,a | | 3 yrs. | | | 127 | 0.449 | | 0.406; 0.492 | |  | | | |  | |  | |
| [22] 1+6,a | | 4 yrs. | | | 127 | 0.472 | | 0.428; 0.516 | |  | | | |  | |  | |
| [22] 1+6,a | | >4 yrs. | | | 127 | 0.496 | | 0.452; 0.540 | |  | | | |  | |  | |

Upper number indicates scale used for the assessment of CHR criteria (1: SIPS; 2: CAARMS; 3: CAARMS 2006 version; 4: other scale; 5: BSABS; and 6: SPI-A)

Upper small letter indicates age group of sample (a: ADULT; b: MIX; c: YOUTH; and d: CAD)

F: according to fixed-effects model

\* *z* > 1.96: significant on 5% level; \*\* *z* > 2.58: significant on 1% level

# Because inclusion of extreme *Ei* values, i.e., 0 or 1, would cause an undue division by 0 in the calculation of or , 0 was replaced by 0.001 and 1 by 0.999 in their calculation.

# S.5. Supplementary Table 3

STable 3 Pairwise comparison of conversion rates at different follow-ups *tx* in samples meeting single UHR criteria (each irrespective of the potential presence of other CHR criteria) and in CHR-negative samples (one-dimensional 2 tests with *df* = 1)

|  |  |  |  |
| --- | --- | --- | --- |
| **Study** | **BLIPS** | **GRFD** | **CHR-negative** |
| **APS** | 6 mths.: 2 = 1.493  1 yr.: 2 = 7.700 \*\*  2 yrs.: 2 = 13.323 \*\*\*  3 yrs.: 2 = 9.459 \*\*  4 yrs.: no data  >4 yrs.: no data | 6 mths.: 2 = 0.162  1 yr.: 2 = 7.700 \*\*  2 yrs.: 2 = 12.675 \*\*\*  3 yrs.: 2 = 20.486 \*\*\*  4 yrs.: no data  >4 yrs.: no data | 6 mths.: 2 = 7.694 \*\*  1 yr.: 2 = 7.493 \*\*  2 yrs.: 2 = 17.102 \*\*\*  3 yrs.: 2 = 4.933 \*  4 yrs.: no data  >4 yrs.: 2 = 1.016 § |
| **BLIPS** |  | 6 mths.: 2 = 2.585  1 yr.: 2 = 0  2 yrs.: 2 = 41.678 \*\*\*  3 yrs.: 2 = 47.092 \*\*\*  4 yrs.: no data  >4 yrs.: no data | 6 mths.: 2 = 13.294 \*\*\*  1 yr.: 2 = 0.080  2 yrs.: 2 = 44.083 \*\*\*  3 yrs.: 2 = 25.570 \*\*\*  4 yrs.: no data  >4 yrs.: no data |
| **GRFD** |  |  | 6 mths.: 2 = 6.194 \*  1 yr.: 2 = 0.080  2 yrs.: 2 = 1.521  3 yrs.: 2 = 7.482 \*\*  4 yrs.: no data  >4 yrs.: no data |

APS: attenuated psychotic symptoms criterion; BLIPS: transient psychotic symptoms criterion; GRFD: genetic risk and functional decline criterion

\* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001

§ both comparative APS samples are CAD samples

# S.6. Supplementary Table 4

STable 4 Pairwise comparison of conversion rates at different follow-ups *tx* in UHR samples assessed with different scales and, relatedly, according to different UHR criteria, and total sample (one-dimensional 2 tests with *df* = 1)

|  |  |  |  |
| --- | --- | --- | --- |
| **Study** | **SIPS** | **CAARMS early versions** | **CAARMS 2006 version** |
| **Total UHR sample** | 6 mths.: 2 = 0.233  1 yr.: 2 = 0.560  2 yrs.: 2 = 0.002  3 yrs.: 2 = 0.054  4 yrs.: 2 = 0.013  >4 yrs.: 2 = 0.379 | 6 mths.: 2 = 0.027  1 yr.: 2 < 0.001  2 yrs.: 2 = 0.370  3 yrs.: 2 = 0.017  4 yrs.: 2 = 0.968  >4 yrs.: 2 = 0.001 | 6 mths.: 2 = 0.080  1 yr.: 2 = 0.551  2 yrs.: 2 = 0.221  3 yrs.: 2 = 2.361  4 yrs.: 2 = 2.519  >4 yrs.: no data |
| **CAARMS early versions** | 6 mths.: 2 = 0.120  1 yr.: 2 = 0.578  2 yrs.: 2 = 0.314  3 yrs.: 2 = 0.011  4 yrs.: 2 = 1.202  >4 yrs.: 2 = 0.351 |  | 6 mths.: 2 = 0.015  1 yr.: 2 = 0.570  2 yrs.: 2 = 1.309  3 yrs.: 2 = 2.769 °  4 yrs.: 2 = 6.453 \*  >4 yrs.: no data |
| **CAARMS 2006 version** | 6 mths.: 2 = 0.051  1 yr.: 2 < 0.001  2 yrs.: 2 = 0.345  3 yrs.: 2 = 3.113 °  4 yrs.: 2 = 2.178  >4 yrs.: no data |  |  |

SIPS: Structured Interview for Psychosis-Risk Syndromes [53]

CAARMS early versions: Comprehensive Assessment for At-Risk Mental States, versions before 2006 versions [54]

CAARMS 2006 version: Comprehensive Assessment for At-Risk Mental States, 2006 version [55]

° p < 0.10; \* p < 0.05

# S.7. Supplementary Table 5

STable 5 Pairwise comparison of conversion rates at different follow-ups *tx* in UHR samples of different age groups and total sample (one-dimensional 2 tests with *df* = 1)

|  |  |  |  |
| --- | --- | --- | --- |
| **Study** | **CAD** | **YOUTH** | **ADULT** |
| **Total UHR sample** | 6 mths.: 2 = 3.003 °  1 yr.: 2 = 1.235  2 yrs.: 2 = 2.718 °  3 yrs.: no data  4 yrs.: no data  >4 yrs.: 2 = 10.045 \*\* | 6 mths.: 2 = 0.760  1 yr.: 2 = 0.970  2 yrs.: 2 = 0.129  3 yrs.: 2 = 0.509  4 yrs.: 2 = 0.968  >4 yrs.: 2 = 0.001 | 6 mths.: 2 = 0.347  1 yr.: 2 = 0.273  2 yrs.: 2 = 0.549  3 yrs.: 2 = 0.138  4 yrs.: 2 < 0.001  >4 yrs.: 2 = 0.158 |
| **YOUTH** | 6 mths.: 2 = 6.447 \*  1 yr.: 2 = 4.275 \*  2 yrs.: 2 = 3.978 \*  3 yrs.: no data  4 yrs.: no data  >4 yrs.: 2 = 9.838 \*\* |  | 6 mths.: 2 = 2.148  1 yr.: 2 = 0.216  2 yrs.: 2 = 0.147  3 yrs.: 2 = 0.117  4 yrs.: 2 = 0.914  >4 yrs.: 2 = 0.187 |
| **ADULT** | 6 mths.: 2 = 1.388  1 yr.: 2 = 2.627  2 yrs.: 2 = 5.568 \*  3 yrs.: no data  4 yrs.: no data  >4 yrs.: 2 = 12.526 \*\*\* |  |  |

CAD: almost entirely minors (≤18 years); YOUTH: ≥50% minors; ADULT: almost entirely adults

° p < 0.10; \* p < 0.05; \*\* p<0.01; \*\*\* p<0.001

# S.8. References of Supplementary Material

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