Supplementary table 1. The occurrence of autism spectrum disorder in the National Patient Register in twins who were screen-positive for autism spectrum disorder in the Child and Adolescent Twin Study in Sweden, born 1st of January 1993- 31st of December 2002

Number of individuals screen-positive in the Child and Adolescent Twin Study in Sweden that also had a diagnosis in the National Patient Register (95% CI:s)

Total (%, 95% Cl:s) 50/190* (26,3%, 20-33)

| - | Annual estimates | | | | | | | | | | |
|--|-------------------|------------------|--------------------|--------------------|--------------------|--------------------|----------------------|---------------------|---------------------|---------------------|--|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
| Screenpositive/ registered diagnosis* | 1/12 | 7/34 | 2/17 | 4/17 | 6/23 | 4/23 | 4/14 | 9/14 | 5/13 | 8/23 | |
| Registered diagnosis** (95% CI:s) | 8.3 (0.0-24.4) | 20.6 (7.0-34) | 11.8 (2.0-35.6) | 23.5 (3.3-43.7) | 26.1 (8.1-44.0) | 17.4 (1.9-32.8) | 28.6 (4.9 - 52.2) | 64.3 (39.1-89.4) | 38.5 (12.0-64.9) | 34.8 (15.3-54.3) | |

^{*} Individuals with a diagnosis in National Patient Register / that also were screen-positive in Child and Adolescent Twin Study in Sweden (cut-off >=8.5). Diagnosis in the National Patient Register ascribed before their 10th birthday

Test for trend p-value p=.0172

^{**}Percentage of individuals screen-positive in Child and Adolescent Twin Study in Sweden who also had a diagnosis of autism spectrum disorder in the National Patient Register

Supplementary table 2. The prevalence of autism spectrum disorder in the National Patient Register in all Swedish twins born from first January 1993 to the 31 of December 2003. Diagnosis in the National Patient Register ascribed before their 10th birthday

| | | | Prevalence of | f autism spectrum dis | sorder in the Nationa | l Patient Register in | Twins* | | | |
|-----------------------|---------|--------|---------------|-----------------------|------------------------|-----------------------|-----------|-----------|------------|---------|
| | | | | Total n | (prevalence , 95% CI:s | 5) | | | | |
| | | | | n = 1 | 107 (0,53%, ,43-63) | | | | | |
| | | | | Ar | nnual prevalence | | | | | |
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| n | 2,984 | 2,772 | 2716 | 2,556 | 2,644 | 2,622 | 2,736 | 2,586 | 2,704 | 2,643 |
| Registered diagnosis* | 0.17 | .51 . | .26 | .55 | .53 | .50 | .69 | .97 | .89 | .41 |
| (95% CI:s | (.0231) | (0277) | (.0745) | (.2683) | (.2581) | (.2376) | (.38-1.01 | (.591.34) | (.53-1.24) | (.1766) |

^{*} Test for trend p-value =.0004

Supplementary table 3. Mean scores of the three modules constituting the autism-score

| | | | | Mean | scores (95% CI:s) | | | | | - |
|---------------------------|---------|---------|---|---------|---|---------|---------|---------|-----------|---------|
| | | | Language Social interaction) Restricted and rep | | .25 (.2426) .27 (.2527) .24 (.2425) | | | | | |
| | | | | Anr | nual Estimates | | | | | |
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| Language/communication | .27 | .28 | .24 | .26 | .23 | .24 | .25 | .22 | .24 | .27 |
| | (.2429 | (.2530) | (.2227) | (.2329) | (.2025) | (.2227) | (.2228) | (.2027) | (.2227) | (.2430) |
| Social interaction | .24 | .29 | .26 | .23 | .25 | .28 | .28 | .25 | .25 | .32 |
| | (.2226) | (.2633) | (.2429) | (.2126) | (.2328) | (.2531) | (.2531) | (.2328) | (.23 .28) | (.2935) |
| Restricted and repetitive | .22 | .27(| .27 | .22 | .24 | .26 | .25 | .20 | .24 | .27 |
| behavior . | (.2025) | .2429) | (.2429) | (.2025) | (.2227) | (.2329) | (.2227) | (.2127) | (.2127) | (.2429) |

| Supplementary ta | hle 4 Resnon | ders and non- | -resnonders ir | n Child and Ado | lescent Twin Stu | ıdv in Sweden | with an autis | m snectrum d | lisorder diagno | osis in the |
|--------------------|---------------------|------------------|----------------------|----------------------|----------------------------------|----------------------|-------------------|--------------------|-----------------------|---------------|
| National Patient R | - | | - | | nescent i win ste | ay iii Sweacii | with an aatis | iii speeti aiii a | iisoraci alagiic | 7515 111 1110 |
| rational rations : | regioter docino | | 101 511.1114 | ۵, | | | | | | |
| Percentag | ge of responders ar | d non-responders | s in Child and Adole | escent Twin Study in | Sweden that has a dia | gnosis of autism spe | ectrum disorder a | ccording to the Na | tional Patient Regist | ier |
| | | | R | esponders in Child a | nd Adolescent Twin St | udy in Sweden | | | | |
| | | | | | prevalence(95% CI:s) | , | | | | |
| | | | | ٨٠ | .46% (.3756) nnual prevalence | | | | | |
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| | | | | | | | | | | |
| | | | | | | | | | | |

| n | 2304 | 2136 | 2088 | 1950 | 2050 | 1864 | 2002 | 1846 | 1882 | 1934 |
|------------------------|------|------|------|----------------------|----------------------|-----------------|------|------|------|------|
| Registered diagnosis% | .09 | .42 | .34 | .51 | .39 | .48 | .75 | .70 | .64 | .41 |
| (n) | (2) | (9) | (7) | (10) | (8) | (9) | (15) | (13) | (12) | (8) |
| | | | Nor | -responders in Child | and Adolescent Twir | Study in Sweden | | | | |
| | | | | Total p | revalence (95% CI:s) | | | | | |
| | | | | | .77% (.5697) | | | | | |
| | | | | ļ | Annual estimate | | | | | |
| n | 680 | 636 | 628 | 606 | 594 | 758 | 734 | 740 | 822 | 720 |
| Registered diagnosis % | .44 | .79 | .00 | .66 | 1.01 | .53 | .54 | 1.62 | 1.46 | .42 |
| (n) | (3) | (5) | (0) | (4) | (6) | (4) | (4) | (12) | (12) | (3) |