Table H1. Quality assessment table of diagnostic accuracy/concordance studies

| **Study, Year** | **Was the test applied to an appropriate spectrum of patients (with and without disease)?****Avoid case-control?** | **Was the population tested random (not consecutive)?** | **Adequate sample size?** | **Eligibility criteria specified?****Was there a rigorous assessment of the CFS population?** | **Reporting of attrition? Minimal loss to followup?** |
| --- | --- | --- | --- | --- | --- |
| Davenport, et al., 201160 | Unclear - CFS group and a non-disabled sedentary control group | Unclear - physician referral | No: n=30100% female | Yes: 2 physicians referred patients meeting criteria | Unclear |
| Davenport, et al., 201161 | Unclear - CFS group and a non-disabled sedentary control group | Unclear - physician referral | No: n=30100% female | Yes: 2 physicians referred patients meeting criteria | Unclear |
| Gaab, et al., 200466 | Unclear - CFS group and a randomly selected control group were matched for age/sex | Unclear for CFS (subjects were recruited from a self-help organization); yes for controls | No: n=4252% female | Yes: all underwent psychiatric evaluation in addition to fulfilling the CFS criteria | Unclear |
| Gaab, et al., 200267 | Unclear - CFS group and a randomly selected control group were matched for age/sex | Unclear for CFS (subjects were recruited from a self-help organization); yes for controls | No: n=3543% female | Yes: all underwent psychiatric evaluation in addition to fulfilling the CFS criteria | Unclear |
| Gaab, et al., 200568 | Unclear - CFS group and a randomly selected control group were matched for age/sex | Unclear for CFS (subjects were recruited from a self-help organization); yes for controls | No: n=4151% female | Yes: all underwent psychiatric evaluation in addition to fulfilling the CFS criteria | Unclear |
| Hadzi-Pavlovic, et al., 200064 | Unclear - CFS controls recruited a non-CFS control | Yes, population-based recruitment of the CFS and control groups | Yes: n=79866% female | Yes/unclear: assessed diagnostic confidence; analyzed with and without those for whom there was less diagnostic confidence | Yes: began with 770subjects; final sample 368 |

Table H1. Quality assessment table of diagnostic accuracy/concordance studies (continued)

| **Study, Year** | **Is the test adequately described and reproducible? Reliable and valid measurements?** | **Validation of test protocol in a second group?** | **Standard case definition?** | **Evaluate all patients for the outcome?** | **Were the outcome assessors blinded to the reference standard (CFS diagnosis)?** | **Quality rating** |
| --- | --- | --- | --- | --- | --- | --- |
| Davenport, etal., 201160 | Yes: describedcardiopulmonary exercise tests in detail and it is reproduced from prior studiesNo reliability/validity results presented | No | Yes: CDC (Fukuda, 1994) | Yes | Unclear | Fair |
| Davenport, etal., 201161 | Yes: used standardizedmeasures | Unclear (reproducibilityassessed statistically and construct validity also assessed) | Yes: CDC (Fukuda, 1994) | Yes | Unclear | Fair |
| Gaab, et al.,200466 | Yes: detailed descriptions ofsalivary cortisol testing No reliability/validity results presented | No | Yes: CFS patients fulfilledboth CDC (Fukuda, 1994) and Oxford (Sharpe, 1991) criteria | Yes | Unclear | Fair |
| Gaab, et al.,200267 | Yes: detailed description ofinsulin tolerance test, ACTH, cortisolNo reliability/validity results presented | No | Yes: CFS patients fulfilledboth CDC (Fukuda 1994) and Oxford (Sharpe 1991) criteria | Yes | Unclear | Fair |
| Gaab, et al.,200568 | Yes: detailed description ofACTH, cortisol, cytokine No reliability/validity results presented | No | Yes: CFS patients fulfilledboth CDC (Fukuda, 1994) and Oxford (Sharpe, 1991) criteria | Yes | Unclear | Fair |
| Hadzi-Pavlovic,et al., 200064 | Yes: used standardizedmeasures | No | Yes: had physician ratingof diagnostic confidence regarding CFS diagnosis | No: 92 of 798subjects were excluded because of incomplete data (70/368 CFS and22/430 controls) | Unclear | Fair |

Table H1. Quality assessment table of diagnostic accuracy/concordance studies (continued)

| **Study, Year** | **Was the test applied to an****appropriate spectrum of patients (with and without disease)?****Avoid case-control?** | **Was the population tested random (not consecutive)?** | **Adequate sample size?** | **Eligibility criteria specified?****Was there a rigorous assessment of the CFS population?** | **Reporting of attrition? Minimal loss to followup?** |
| --- | --- | --- | --- | --- | --- |
| Jason, 201056 | Yes - community-basedrecruitment of CFS population | Yes - recontact of subjects fromcommunity-based CFSrecruitment | Unclear: n=108% Female: NR | Yes: 2 physiciansindependently rated | YesLoss to follow up: began with 213 from the community sample; data available on 84 without CFS and 24 with CFS |
| Jason, 201165 | Yes - had 2 groups of CFSpatients (tertiary care and community sample) and control from community | Yes - community samplesrecruited from stratified random sample of Chicago neighborhoods; tertiary care CFS group also recruited from variety of sources (physician,newspaper, CFS support groups) | No: n=7958% female | Yes: 4 physicians and 1psychiatrist responsible for final decision about diagnosis of community sample; tertiary sample had psychiatric interview | Unclear |
| Linder, et al.,200263 | Yes - CFS population withfibromyalgia and lupus patients as controls | Unclear - recruited by studyphysicians | Unclear: n=19868% female | Unclear: few details about howpatients were assessed; excluded primary psychiatric disorders | Unclear |
| Tiev, et al.,200362 | Unclear - case-control study;recruitment not reported | Unclear (NR) | No: n=2564% female | Unclear | Unclear |
| Watson, et al.,201469 | Yes - had 3 groups includingsome CFS subjects recruited from community/internet forums | Yes/unclear - CFS subjectsrecruited from various sources including internet and some physician referral | Yes: n=691% female: NR | Unclear: all subjects haddiagnosed by licensed physician; those with exclusionary diagnoses were removed. | Yes, reportedmissing values and procedure for replacement. |

Table H1. Quality assessment table of diagnostic accuracy/concordance studies (continued)

| **Study, Year** | **Is the test adequately described and reproducible? Reliable and valid measurements?** | **Validation of test protocol in a second group?** | **Standard case definition?** | **Evaluate all patients for the outcome?** | **Were the outcome assessors blinded to the reference standard (CFS diagnosis)?** | **Quality rating** |
| --- | --- | --- | --- | --- | --- | --- |
| Jason, 201056 | Used Reeves 2005 criteria asthe diagnostic test | No | Yes: screeningquestionnaire, then DSM- IV interview, medical history/exam and symptom inventory; all met CDC (Fukuda, 1994) criteria | Unclear | Unclear | Fair |
| Jason, 201165 | Yes: used standardizedmeasures | No | Yes: 2 physiciansindependently rated each file using the CDC (Fukuda, 1994) criteria | Yes | Unclear | Fair |
| Linder, et al.,200263 | Yes: used prospectiveassessment of 26 symptoms taken from CFS, FMS and SLE diagnostic criteria | Yes: study samplerandomly divided into development and validation cohorts | Yes: Oxford (Sharpe,1991) | Unclear | Unclear | Good |
| Tiev, et al.,200362 | Yes: laboratory test for RnaseL levels described in detailNo reliability/validity presented | No | Yes: CDC (Fukuda 1994) | Yes | Unclear | Poor |
| Watson, et al.,201469 | Yes: unsupervisedthresholding algorithm | No | Yes: CDC (Fukuda,1994), Canadian and ME- ICC | Yes: for thoseincluded, all data were used. | Unclear | Fair |

**Abbreviations:** ACTH = adrenocorticotropic hormone; CDC= Centers for Disease Control and Prevention; CFS= chronic fatigue syndrome; DSM-IV= Diagnostic and Statistical Manual, fourth edition; FMS= fibromyalgia; n= sample size; NR= not reported; RCT= randomized, controlled trial; Rnase L= latent ribonuclease; SLE=systemic lupus erythematosus; UK= United Kingdom.