

**Supplementary Table 2: Quality assessment of included primary studies investigating the diagnostic accuracy of the ECG, BNP and NT-proBNP in the diagnosis of LVSD**

Study Reference	Selection bias absent	100% reference standard available for those in study sample / patients with missing test results included in analysis (partial verification bias absent)	Blind	Repeatable	Reliability (inter-observer & intra-observer) reported	'Simultaneous' application of test and reference standard (as a reflection of treatment paradox and disease progression bias)
Alehagen et al 2003 <sup>47</sup>	✓	☒	✓	✓	✓	?
Baker et al 2003 <sup>48</sup>	✓	✓*	✓	✓	✓	Same day‡
Betten-court et al 2000 <sup>49</sup>	✓	✓	✓	✓	✓ BNP	Within 1 hour
Byrne et al 1996 <sup>50</sup>	✓	?	?	✓	☒	5-7 months
Campbell et al 2000 <sup>51</sup>	☒	✓	?	✓	✓	?
Choy et al 1994 <sup>52</sup>	✓	☒	✓	☒	☒	?
Cosin et al 2003 <sup>53</sup>	✓	☒	✓	✓	☒	?
Cowie et al 1997 <sup>54</sup>	✓	✓	?	✓	☒	Same day
Davie et al 1996 <sup>55</sup>	☒	✓	✓	✓	☒	Same day‡
Fox et al 2000 <sup>56</sup>	?	✓	?	☒	☒	Same day
Hobbs et al 2002 <sup>57</sup>	✓	?	✓	BNP ✓ ☒ ECG & echo	☒	?
Houghton et al 1997 <sup>58</sup>	☒	✓	✓	✓	✓	Same day‡
Hutcheon et al 2002 <sup>59</sup>	☒ ECG	✓	✓	✓	☒	Same day‡
Khandekar et al 1996 <sup>60</sup>	☒	✓	✓	✓	☒	Same day‡
Krishnaswamy et al 2001 <sup>61</sup>	✓	✓	✓	✓	✓ BNP	?
Kruger et al 2004 <sup>62</sup>	☒ ECG ✓ BNP	?	?	✓	☒	Same day‡
Landray et al 2000 <sup>63</sup>	☒ ECG ✓ BNP	☒	☒	☒	☒	Same day‡
Lindsay et al 2000 <sup>64</sup>	?	✓	✓	✓	☒	Same day‡
Mattleman et al 1983 <sup>65</sup>	☒	✓	✓	✓	☒	Same day
McClure et al 1998 <sup>66</sup>	✓	✓	✓	✓	☒	Same day
Mosterd et al 1997 <sup>67</sup>	☒	☒	?	☒	☒	?
Neilson et al 2000 <sup>68</sup>	☒	✓	✓	✓	✓	?
Nielson et al 2004 <sup>69</sup>	✓	☒	?	✓ BNP ☒ reference standard	☒	Within 2 weeks

**Table 2 contin.**

Study Reference	Selection bias absent (Sampling or other features increase likelihood of selection bias)	100% reference standard available for those in study sample / patients with missing test results included in analysis (partial verification bias)	Blind	Repeatable	Reliability (inter-observer & intra-observer) reported	'Simultaneous' application of test and reference standard
Richards et al 1998 <sup>70</sup>	?	✓	✓	?	☒.	4 months
Charanjit et al 1996 <sup>71</sup>	☒	☒	?	✓	☒	?
Sim et al 2003 <sup>72</sup>	✓	✓	?	✓	✓	Same day‡
Talreja et al 2000 <sup>73</sup>	✓	✓	✓	✓	☒	Less than 1 week
Valli et al 2001 <sup>74</sup>	✓	✓	✓	✓	☒	?
Wright et al 2003 <sup>75</sup>	?	✓*	✓	BNP ✓; echo ☒	✓	Same day‡
Yamamoto et al 1996 <sup>76</sup>	✓	?	✓	✓	✓	Within 3 hours
Yamamoto et al 2000 <sup>77</sup>	?	✓	✓	✓	☒	Same day‡
Zaphiriou et al 2003 <sup>78</sup>	✓	✓	✓	BNP ✓; echo ☒	☒	Same day‡

**Notes to table 2:**

**Selection bias:** Sampling or other features of study design and execution increase the likelihood that the study sample is not representative of patients with suspected LVSD in the study setting.

**Verification bias:** Bias introduced when the results of the test under evaluation influences whether the reference test is used. Occurs if participants are referred for the reference test according to the results of the test under evaluation.

**Blind:** Were professionals performing outcome assessment (investigations) blind to the status of patients (including results of other tests).

**Repeatable:** Was enough information provided to allow a repeat of the study.

\* <1% of sample did not have reference test results available

‡ assumed 'yes' on the basis that all tests were carried out at an open access echo or heart failure clinic.