

Table 23.1 HRQoL results from the Mathew study

Responders		
SF-36 scores	t = 24 weeks	t = 72 weeks (follow-up)
Vitality score	-8.28	+5.69
Bodily pain score	-3.31	+1.96
Role emotional score	-4.98	+5.50
Non-responders		
SF-36 scores	t = 24 weeks	t = 72 weeks (follow-up)
Vitality score	-3.47	+2.05
Bodily pain score	-3.73	+1.32
Role emotional score	-1.20	-0.63

of care ranges from 45 to 95%, where success is defined as sustained eradication of HCV (5).

Eradication of hepatitis C virus requires adherence to the drug treatment schedule. Interferon-induced depression is a major source of failure to take anti-HCV drugs. Interferon-alpha can also cause depression when used for other indications, that is, hepatitis B virus (HBV) and melanoma. From 15 to 60% of patients receiving interferon-alpha get psychiatric side effects, such as depression (6).

The relationship between interferon-alpha and depression has produced the following irony. Loftus et al. (7) observed that the cure rate was better on chronic HCV patients who developed depression, and that the cure rate was lower in chronic HCV patients who did not develop depression. In other words, the cure rate was better in patients who developed depression, apparently because these patients allowed themselves to be treated to the extent that the drug caused recovery from the virus, as well as the adverse drug reaction of depression.

a. Example of hepatitis C virus HRQoL – the Mathew study

Mathew et al. (8) conducted a study on patients with chronic HCV. All patients received ribavirin plus IFN-alpha2b.

HRQoL questionnaires (SF-36) were administered at zero weeks (baseline), 24 weeks, 48 weeks, and at 72 weeks after end of treatment. Drugs were administered from baseline until 48 weeks. The HRQoL data collected at 72 weeks constitutes follow-up data.

⁵ Horsmans Y. Interferon-induced depression in chronic hepatitis C. *J Antimicrob Chemother.* 2006;58:711–713.

⁶ Horsmans Y. Interferon-induced depression in chronic hepatitis C. *J Antimicrob Chemother.* 2006;58:711–713.

⁷ Loftis JM, Socherman RE, Howell CD, et al. Association of interferon-alpha-induced depression and improved treatment response in patients with hepatitis C. *Neurosci Lett.* 2004;365:87–91.

⁸ Mathew A, Peiffer LP, Rhoades K, McGarrity TJ. Improvement in quality of life measures in patients with refractory hepatitis C, responding to re-treatment with Pegylated interferon alpha-2b and ribavirin. *Health Qual Life Outcomes.* 2006;4:30–38.