An Evaluation and Rebuttal of the
Expert Rebuttal Opinion on Respondent
[redacted] MD rendered on [redacted]

Legal Division Case No. [redacted]
Investigation Log No. [redacted]

By Thomas E. Levy, MD, JD

This evaluation/rebuttal will focus primarily on the use of vitamin C in the treatment of sepsis as utilized by [redacted] in the treatment of a patient with sepsis.

Most significantly, the following statement was made in the Expert Rebuttal Opinion, author not specified:

> "I am not aware of any significant uses for vitamin C and glutathione in the treatment of sepsis."

I would respectfully suggest that the case of [redacted], should it continue to be pressed, to be reviewed by someone who is familiar with the massive body of literature addressing the use of vitamin C in the treatment of a wide variety of infections, including life-threatening sepsis. If the above statement is as plainly truthful as it reads, this particular expert should recuse himself or herself from this case in which serious questions have been raised over the appropriateness of using vitamin C for the treatment of [redacted] patient. It truly would be no different than having a pediatrician review the work of a cardiothoracic surgeon, or vice-versa.

In my book, *Vitamin C, Infectious Diseases, and Toxins*, first edition published in 2002, the benefits of vitamin C in the treatment of infectious diseases are clear-cut. In particular, *Staphylococcus* and *Streptococcus* are two bacteria that have been found to be exquisitely sensitive to the bactericidal abilities of vitamin C, both *in vitro* and *in vivo*. A detached, purely scientific and medical review of the data accumulated on this aspect of vitamin C therapy leaves no other reasonable conclusion than that vitamin C is not only of benefit, but that it is actually the agent of choice for such infections, when properly dosed. Virtually all current therapies used today have vastly less profound and less voluminous data to support their clinical application than is the case for vitamin C in patients with *Staphylococcus* and *Streptococcus* infections.

The fact that vitamin C is virtually absent from the formularies of all hospitals in the United States is not a valid argument against its use. The lack of an awareness of a valid therapy by a majority of physicians is not a scientific argument of its lack of effectiveness. It only speaks to the fact that a large, although minority, number of equally trained physicians throughout the world effectively and frequently use a therapy that the majority of physicians prefer to leave unacknowledged.

Aside from its effectiveness and completely appropriate use in the treatment of infections that have proceeded to sepsis, it needs to be emphasized that clear documentation attests to the fact that vitamin C has no defined level of toxicity, and caution is only routinely indicated in its application with patients with renal failure, as in the case with virtually all prescription medicines as well. This level of safety contrasts greatly with the well-established toxicity of the appropriately prescribed antibiotic used by [redacted] in the patient with sepsis. The literature clearly shows that vitamin C, in patients without renal failure, helps to resolve kidney stones, not cause them. Yet this medical myth continues to be bandied about by many physicians who have virtually zero exposure to vitamin C literature and who have definitely never used it even once in the treatment of a hospitalized patient. The article by Padayatty cited at the end of this rebuttal is impressive in its scope, and by no means is the only article documenting the safety of vitamin C. It is cited as being exemplary of the many other similar articles on the exceptional safety of vitamin C.

It needs to be added that not only is vitamin C exceptionally safe, it also augments the effectiveness of any antibiotics used with it. It helps to reduce many of the negative and toxic effects of prescription antibiotics, and it is well-documented to support and stimulate a wide variety of immune system functions, including, but certainly not limited to, enhanced antibody production, interferon production, phagocytic/macrophage function, B-lymphocyte and T-lymphocyte proliferation, and natural killer cell activity.

The literature also shows that sepsis patients are depleted of vitamin C, and blood measurements of vitamin C in this subset of patients usually reveal a depletion that is not minimal, but profound. As such, the case can once again be made that the standard of care in sepsis should mandate vitamin C therapy, at the very least to the degree that the plasma levels of vitamin C can be restored to normal and maintained there during the course of the hospitalization. This is also true of the intracellular levels of glutathione, the antioxidant of greatest importance inside the cells of patients with infectious diseases and chronic degenerative diseases. Giving glutathione to sepsis patients is only one more measure to help normalize cellular physiology in an attempt to combat the infectious agent and its negative metabolic consequences.

Of note as well, although it should not be significant factor in the treatment of a critically ill patient, is the cost of vitamin C. It is vastly less costly than any single antibiotic or combination of antibiotics being prescribed today, in either an outpatient or inpatient capacity.

Vitamin C should be routinely used in septic patients, in multi-gram doses, preferably intravenously in amounts of 25 to 150 grams daily, depending on patient size and how seriously ill the patient is perceived to be clinically. The sicker and larger the patient, the more vitamin C should be given. The fact that this is not occurring even infrequently in United States hospitals today brings into question the practice of the majority of physicians, not the minority who are offering even more to their patients.

All physicians have the legal and moral obligation to give their patients any therapy that is effective, nontoxic, and inexpensive. Not being aware of such a therapy is actually a legally arguable question of clinical negligence. However, trying to deny a physician the right to give

such therapy to his or her patient is not justifiable in any capacity. Just as the ignorance of a well-documented and easily accessible medical fact is not a complete defense against medical malpractice, using a well-documented but widely underutilized and unappreciated medical therapy is never inappropriate, and it is certainly not an argument for medical malpractice against such a physician.

I would therefore respectfully submit to you that the use of vitamin C in the treatment of the sepsis patient in question by [redacted] was not only completely appropriate medically, but was in keeping with an even higher standard of care for this individual than is traditionally delivered.

References

Levy, T. (2002) *Vitamin C, Infectious Diseases, and Toxins,* Xlibris Publishing

Padayatty S, A Sun, Q Chen, M Espey, J Drisko, M Levine (2010) Vitamin C: Intravenous use by complementary and alternative medicine practitioners and adverse effects. *PLoS One* 5:e11414. PMID: 20628650

Thomas E. Levy, MD, JD
[redacted]
televymd@yahoo.com
www.peakenergy.com