1086-60-1124 **Yumin Wang*** (yumin@siu.edu), 2006 Woodriver Dr. #19, Carbondale, IL 62901. *Efficient Hedging For Guaranteed minimum death benefits.* Preliminary report.

The idea of efficient hedging has been introduced by Föllmer and Leukert. They look for hedges which are efficient with respect to the partial ordering defined by the average of the capital injected weighted by the loss function and the initial capital. Guaranteed minimum death benefits (GMDBs) are present in various annuity contracts, and act as a form of portfolio insurance. They cannot be perfectly hedged due to the mortality component, except in the limit as the number of contracts becomes infinitely large. In this article, we uses the efficient hedging methodology to derive pricing formula for these products under various assumptions. (Received September 19, 2012)