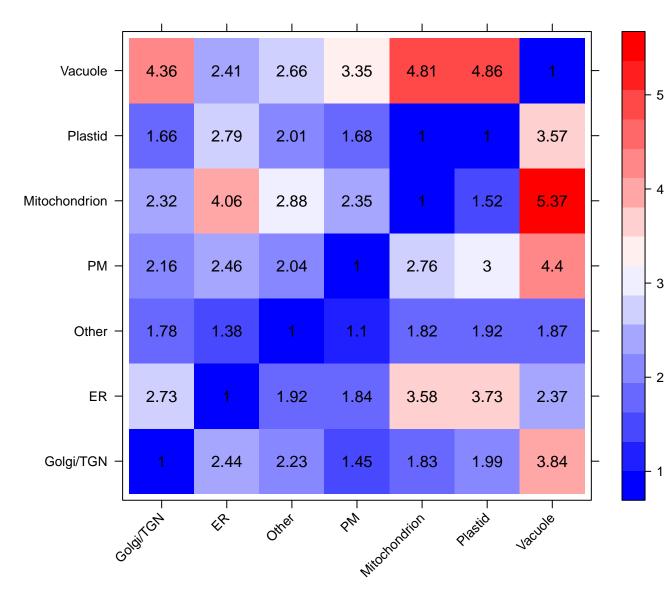nikolovski2012imp