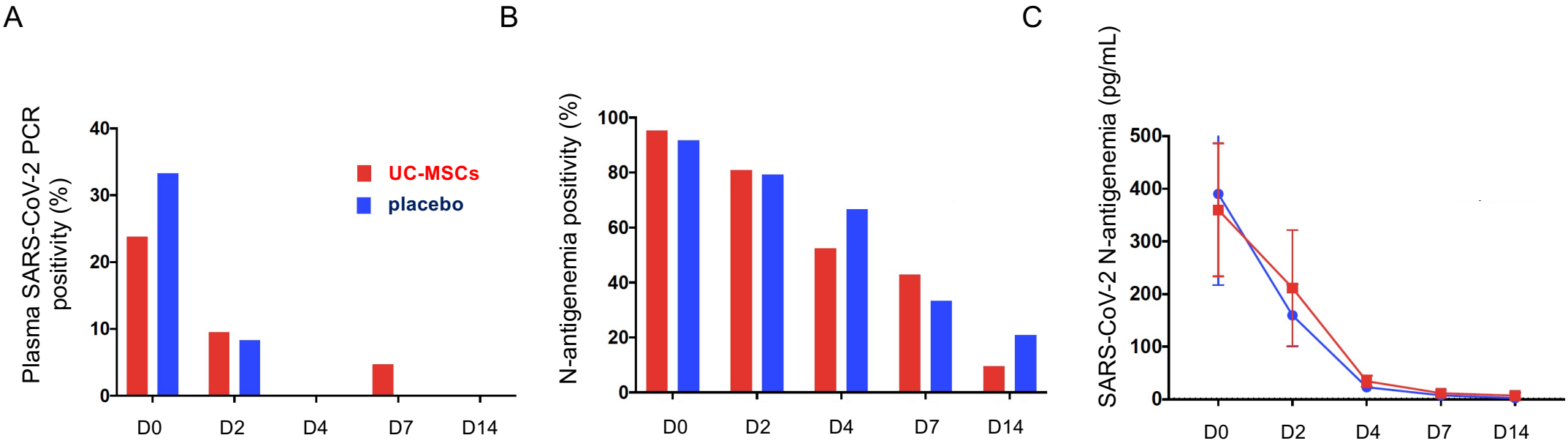ADDITIONAL FIGURE 4