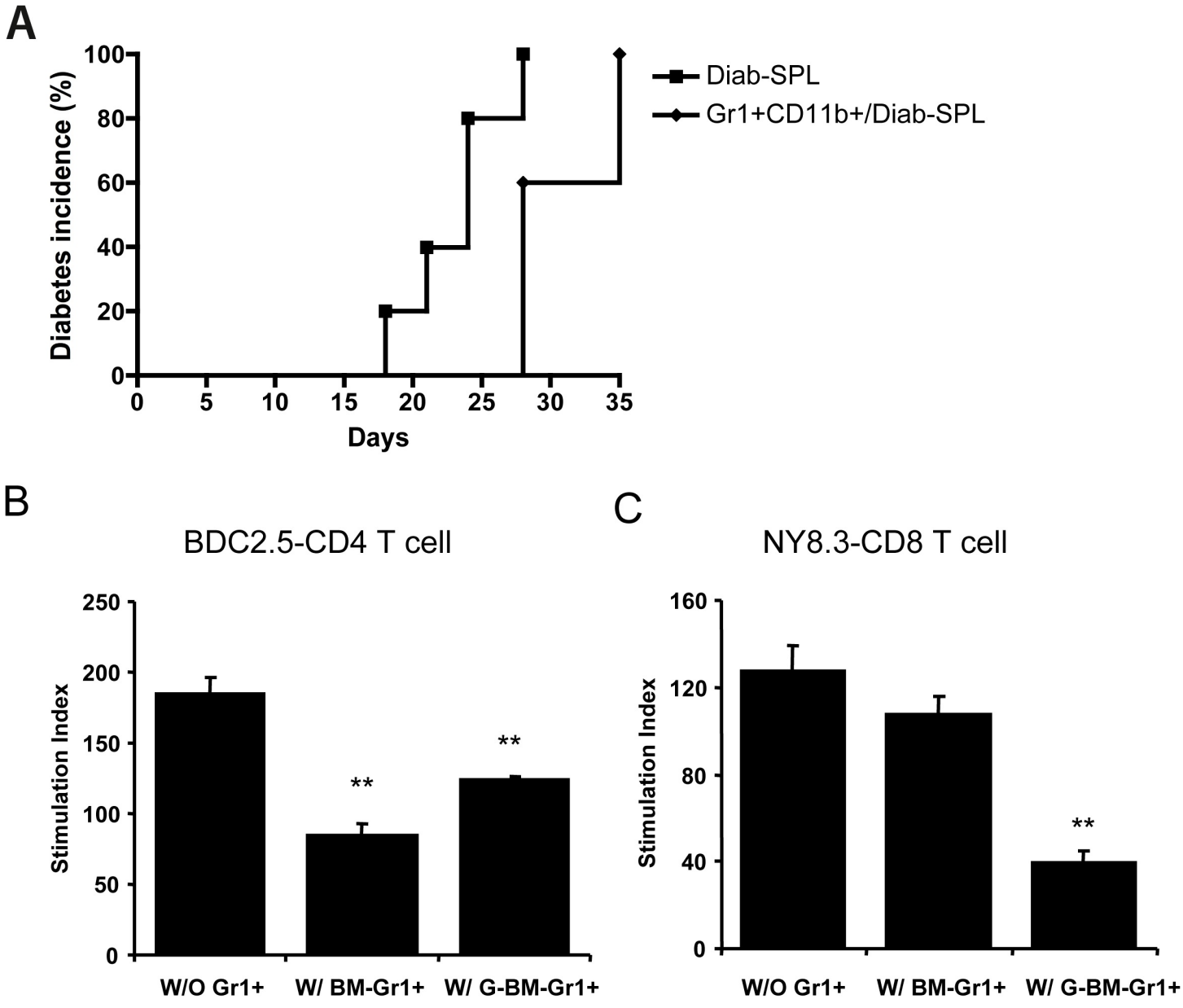
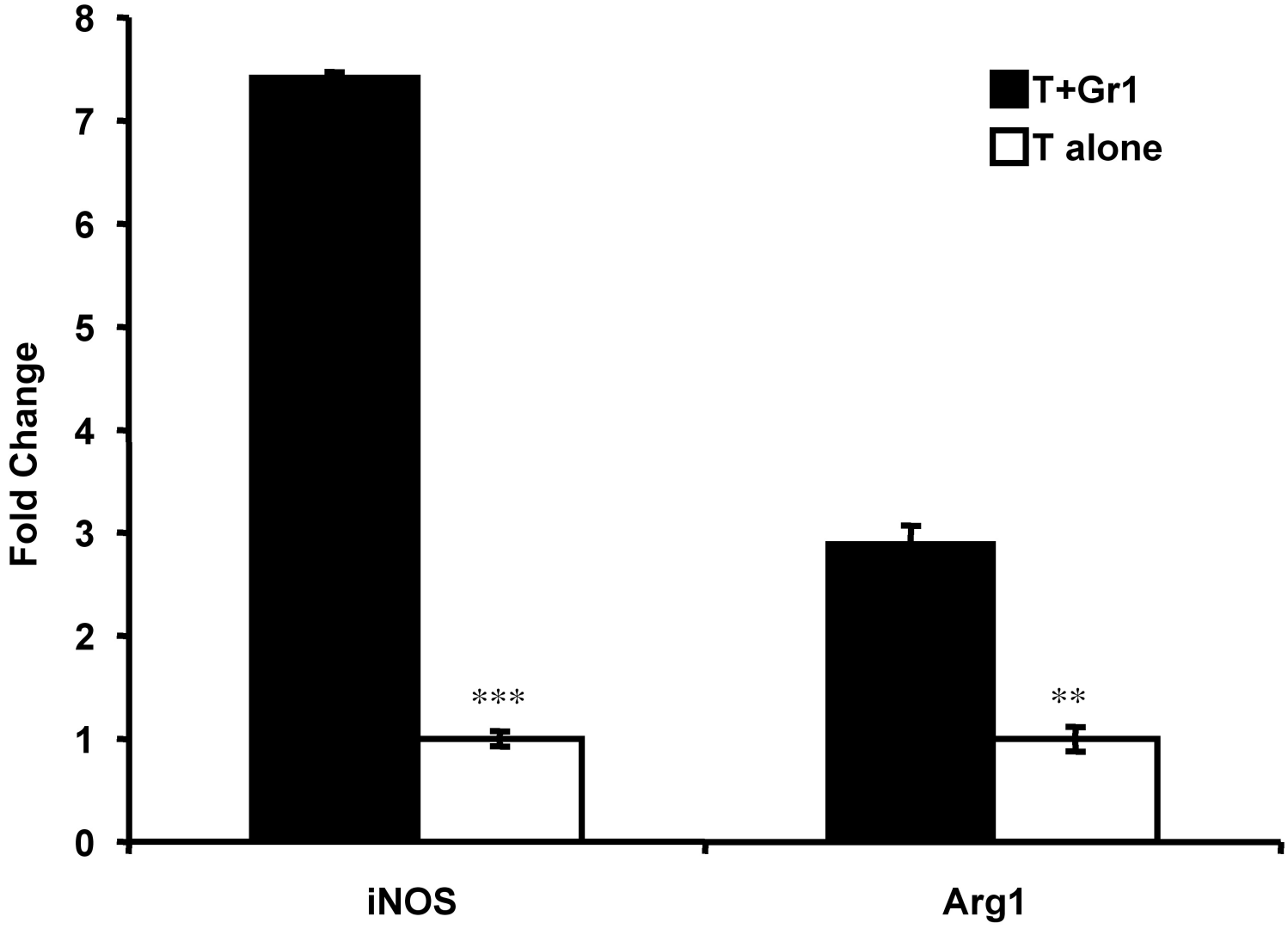

A
Diabetes incidence (%)
100
80
60
40
20
0
0
5
10
15
20
25
30
35
Days
Diab-SPL
Gr1+CD11b+/Diab-SPL
B
BDC2.5-CD4 T cell
Stimulation Index
250
200
150
100
50
0
**
**
W/O Gr1+
W/ BM-Gr1+
W/ G-BM-Gr1+
C
NY8.3-CD8 T cell
Stimulation Index
160
120
80
40
0
**
W/O Gr1+
W/ BM-Gr1+
W/ G-BM-Gr1+


8
7
6
5
4
3
2
1
0
Fold Change
T+Gr1
T alone
***
**
iNOS
Arg1

Supplementary Figure legends:

Supplementary figure 1. $Gr1^+CD11b^+$ cells delayed diabetes development in adoptive transfer. Bone marrow derived $Gr1^+CD11b^+$ cells were cultured as described (11). Briefly, bone marrow cells were flushed from the femurs and tibiae of NOD mice. Bone marrow cells were depleted of red cells and cultured in Bruff's medium (Invitrogen) with 5% FCS in the presence of GM-CSF (1% supernatant from J558L cells transfected with mouse GM-CSF construct) and recombinant IL-6 (20 ng/ml, Peprotech). Four days later, cells were harvested and $Gr1^+CD11b^+$ cells were purified by FACS sorting. A) 2 x 10^6 bone marrow derived $Gr1^+CD11b^+$ cells were co-transferred with 6 x 10^6 splenocytes from diabetic NOD mice into 6-week old NOD.SCID mice (n=5 for each group). Diabetes development was monitored by glycosuria tested twice a week. Diabetes was confirmed by blood glucose measurement greater than 250 mg/dl (13.9mmol/l). Bone marrow derived $Gr1^+CD11b^+$ cells significantly delayed the onset of diabetes when cotransferred with splenocytes from diabetic NOD mice (Diab-SPL) compared with the control group (Log-rank test, p=0.0127). FACS sorted $Gr1^+CD11b^+$ cells (2 x 10^4/well) from untreated (BM) or GM-CSF/ IL-6 treated (G-BM) bone marrow cells were cultured with BDC2.5 CD4 T cells (10^5/well) (B) or NY8.3 CD8 T cells (10^5/well) (C) and proliferation with BM-Gr1+ cells (W/BM-Gr1+) or G-BM-Gr1+ cells (W/G-BM-Gr1+) is shown compared to T cells cultured in the absence of GR1+ cells (W/O Gr1+). The background CPM counts were between 400 and 600. P values were calculated by Student's t test. ** $P<0.001$.

Supplementary Figure 2. *iNOS* and *Arg1* gene expression. Purified $Gr1^+CD11b^+$ cells were co-cultured with naïve T cells at 1:5 ratio for 5 days. Arg1 and iNOS mRNA were detected by quantitative PCR in the $Gr1^+CD11b^+$ cell co-cultures (Gr1+T) compared with naïve T cells alone (T). **$p<0.001$, ***$p<0.0001$.