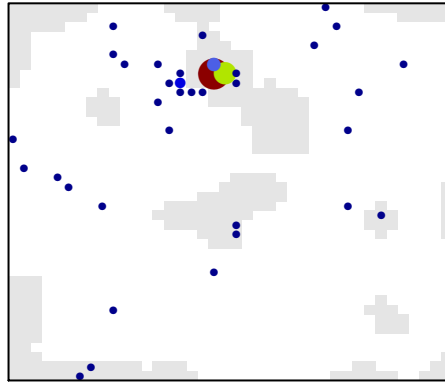
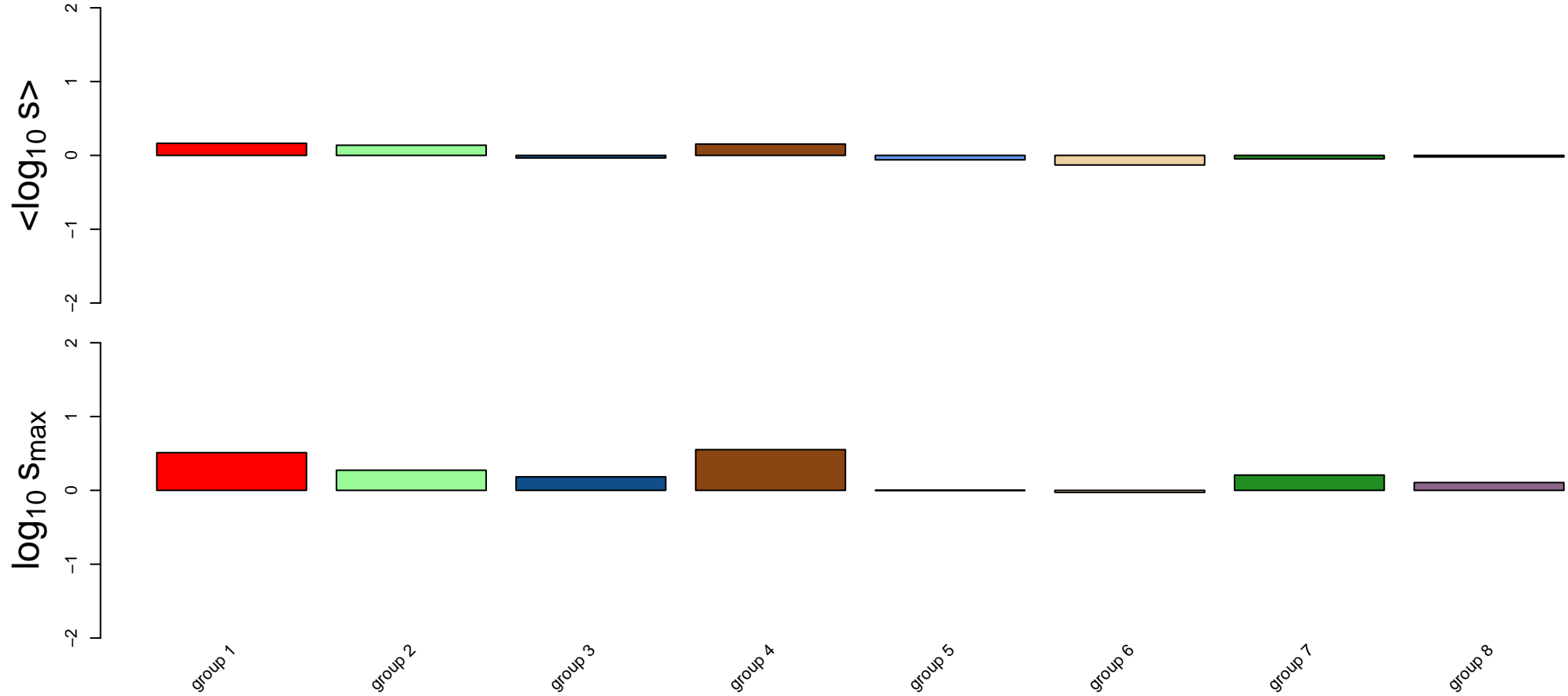
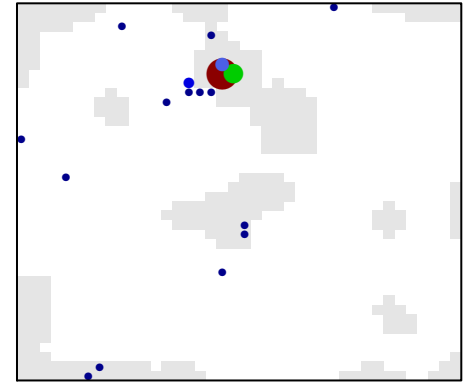


Allograft rejection

all genes



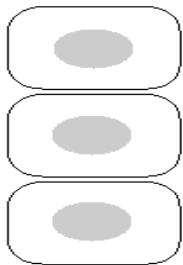
sink node genes



Allograft_rejection genes with data

MHC: Donor MHC
MHC: Recipient MHC

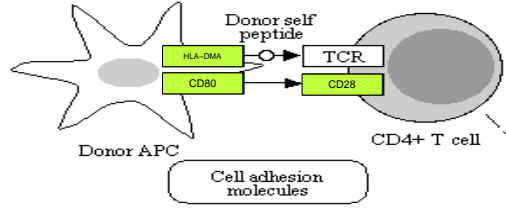
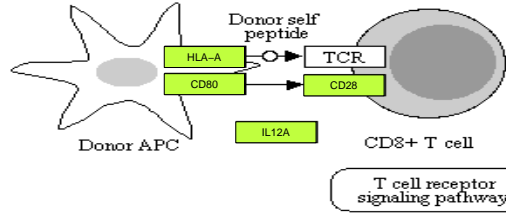
Donor parenchymal graft cells



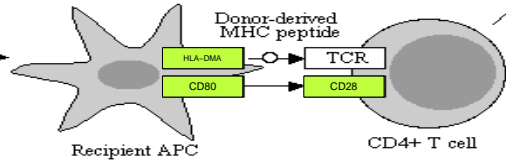
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

Direct allorecognition



Indirect allorecognition



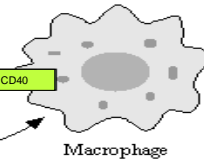
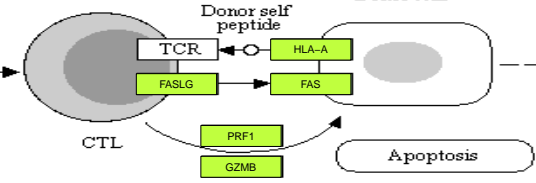
IL2

T cell receptor signaling pathway

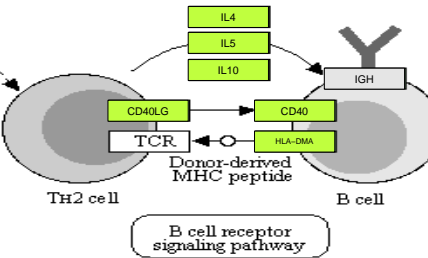
Cell adhesion molecules

B cell receptor signaling pathway

Rejection



TNF
NO
Cytotoxicity



Alloantibody
Complement-mediated damage
ADC

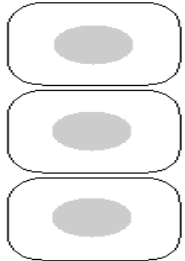
Complement and coagulation cascades

Allograft destruction

Allograft_rejection
sink nodes

MHC: Donor MHC
MHC: Recipient MHC

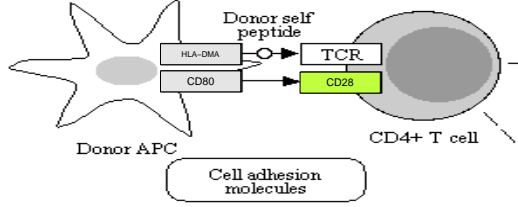
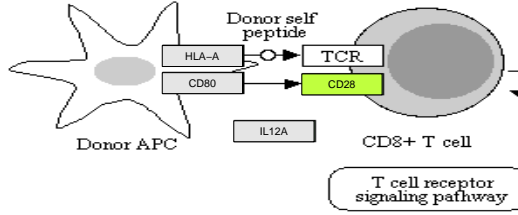
Donor parenchymal
graft cells



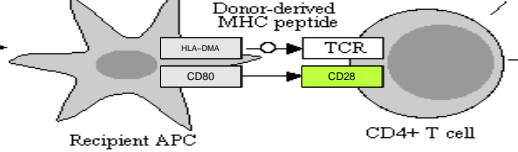
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

Direct allorecognition



Indirect allorecognition



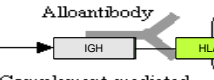
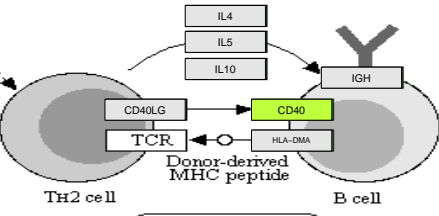
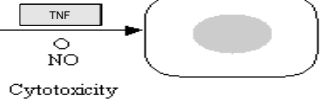
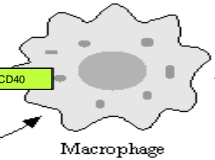
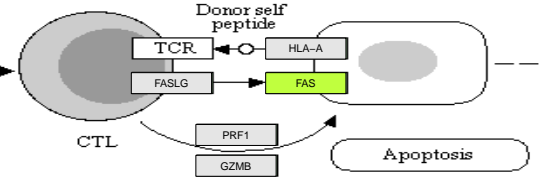
IL2

T cell receptor signaling pathway

Cell adhesion molecules

B cell receptor signaling pathway

Rejection



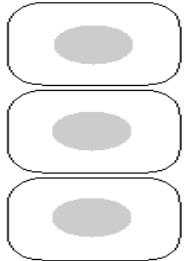
Complement and coagulation cascades

Allograft destruction

Allograft_rejection
group 1

MHC: Donor MHC
MHC: Recipient MHC

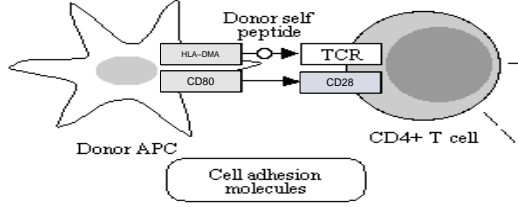
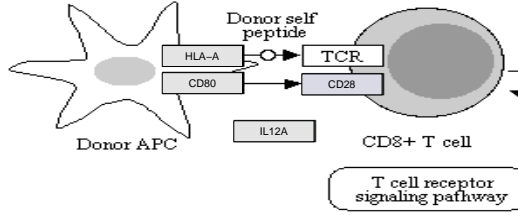
Donor parenchymal
graft cells



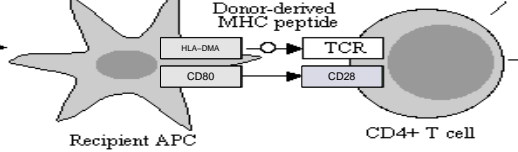
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

Direct allorecognition



Indirect allorecognition



IL2

CD40LG

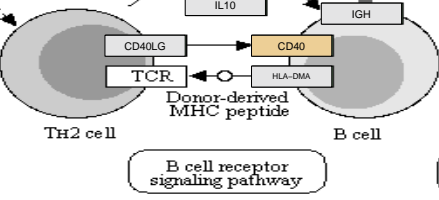
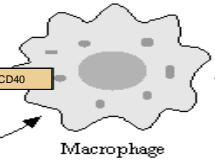
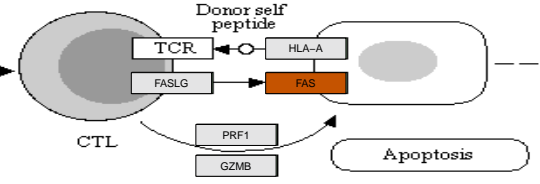
IL4

IL5

IL10

B cell receptor signaling pathway

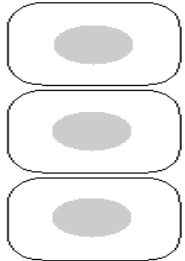
Rejection



Allograft destruction

MHC: Donor MHC
MHC: Recipient MHC

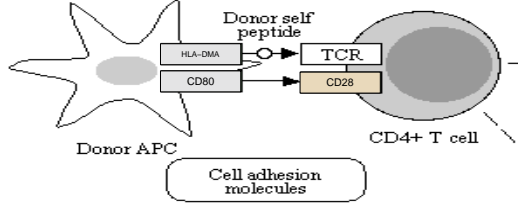
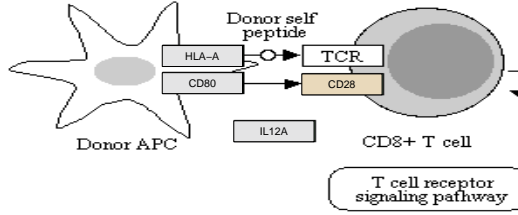
Donor parenchymal graft cells



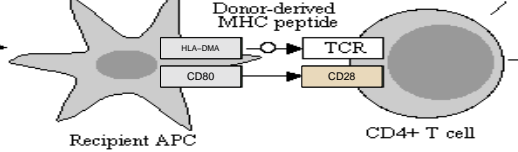
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

Direct allorecognition



Indirect allorecognition



IL2

CD40LG

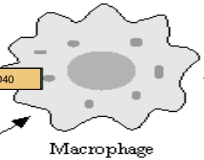
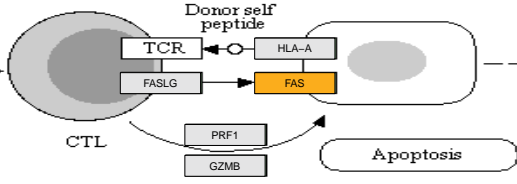
IL4

IL5

IL10

B cell receptor signaling pathway

Rejection



TNF
NO
Cytotoxicity

IFNG

CD40LG

Donor-derived MHC peptide

B cell receptor signaling pathway

Alloantibody
Complement-mediated damage
ADC

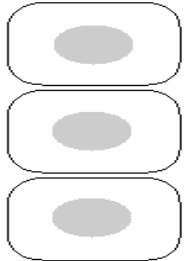
Complement and coagulation cascades

Allograft destruction

Allograft_rejection
group 3

MHC: Donor MHC
MHC: Recipient MHC

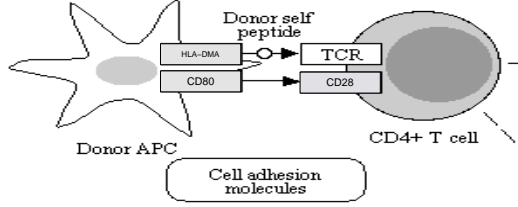
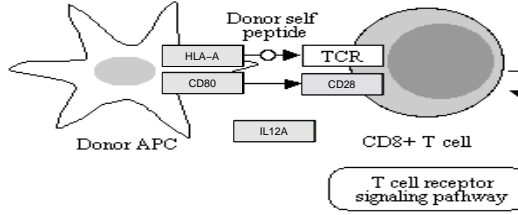
Donor parenchymal
graft cells



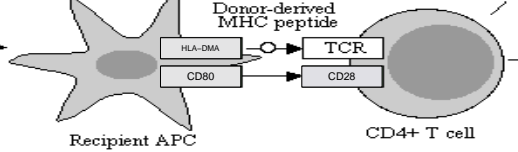
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

Direct allorecognition



Indirect allorecognition



IL2

T cell receptor signaling pathway

Cell adhesion molecules

CD4+ T cell

IFNG

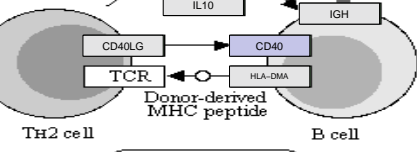
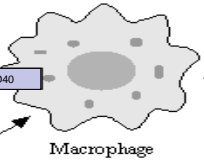
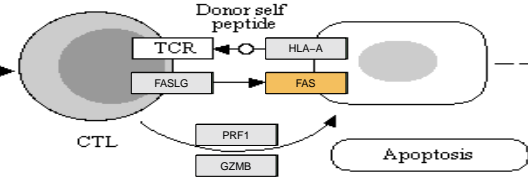
IL4

IL5

IL10

B cell receptor signaling pathway

Rejection



Alloantibody

Complement-mediated damage ADC

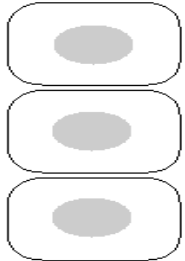
Complement and coagulation cascades

Allograft destruction

Allograft_rejection
group 4

MHC: Donor MHC
MHC: Recipient MHC

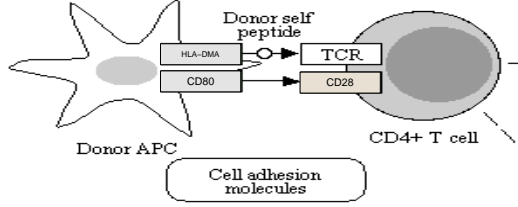
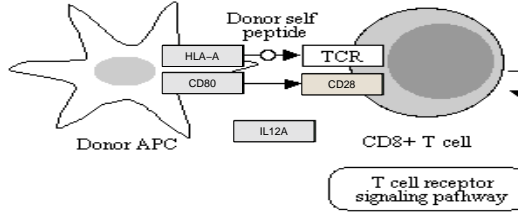
Donor parenchymal
graft cells



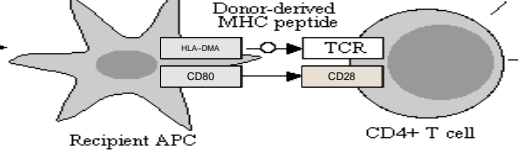
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

Direct allorecognition



Indirect allorecognition



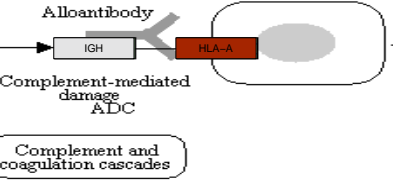
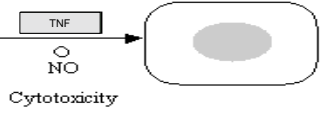
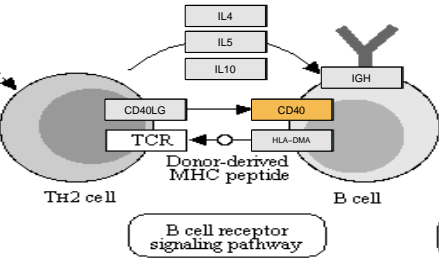
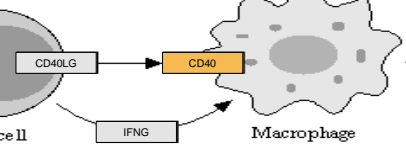
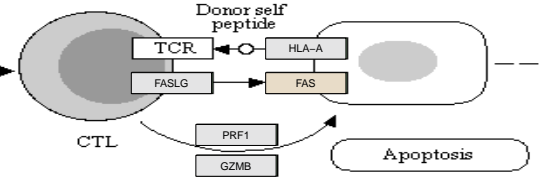
IL2

T cell receptor signaling pathway

Cell adhesion molecules

B cell receptor signaling pathway

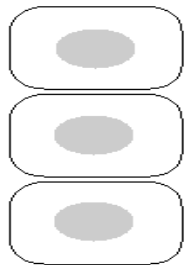
Rejection



Allograft destruction

MHC: Donor MHC
MHC: Recipient MHC

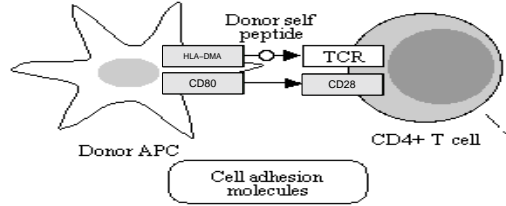
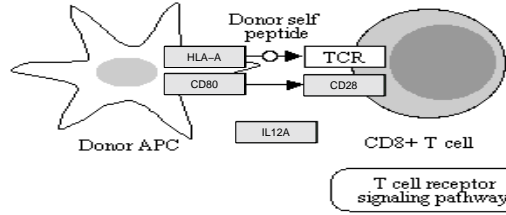
Donor parenchymal graft cells



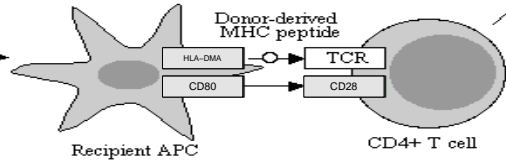
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

Direct allorecognition



Indirect allorecognition



IL2

CD40LG

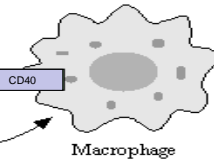
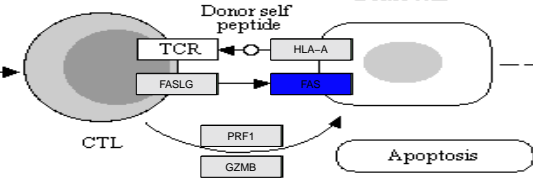
IL4

IL5

IL10

B cell receptor signaling pathway

Rejection



TNF
NO
Cytotoxicity

IFNG

CD40LG

TCR

HLA-DMA

B cell receptor signaling pathway

Alloantibody

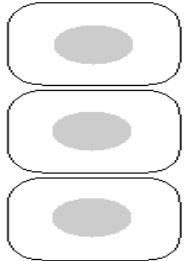
IGH

Complement-mediated damage ADC
Complement and coagulation cascades

Allograft destruction

MHC: Donor MHC
MHC: Recipient MHC

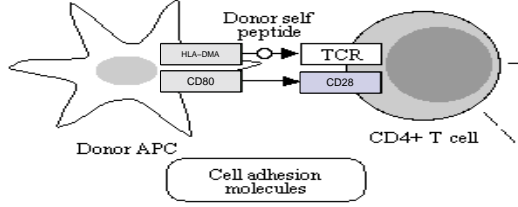
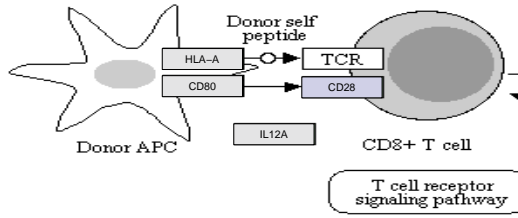
Donor parenchymal graft cells



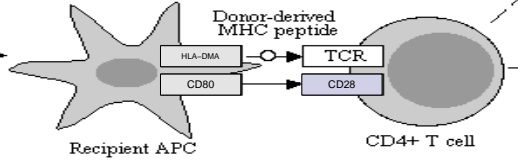
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

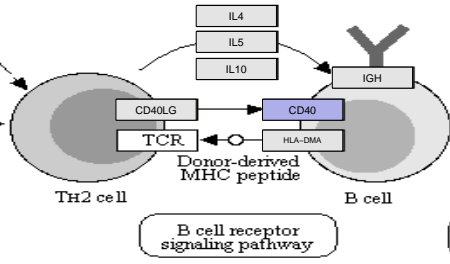
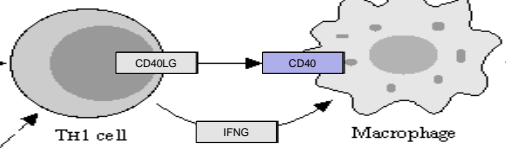
Direct allorecognition



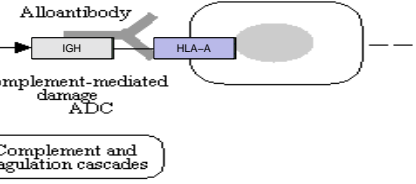
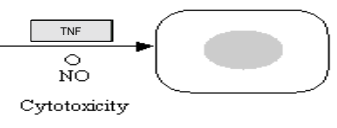
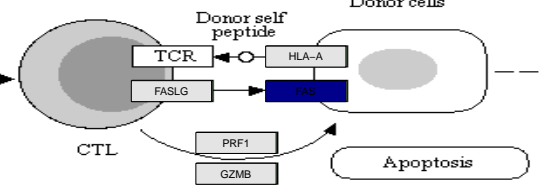
Indirect allorecognition



IL2



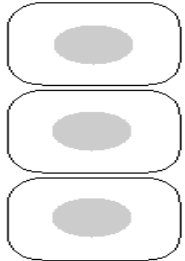
Rejection



Allograft destruction

MHC: Donor MHC
MHC: Recipient MHC

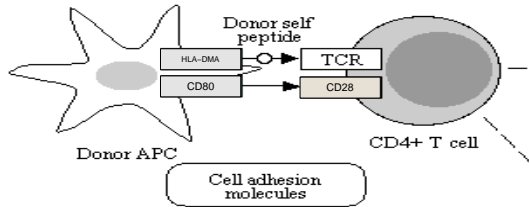
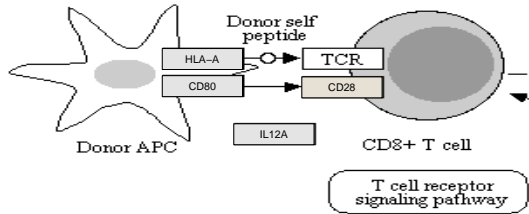
Donor parenchymal graft cells



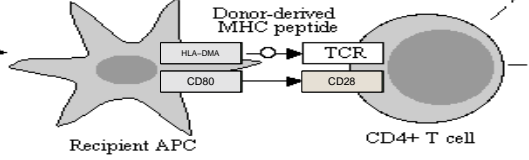
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

Direct allorecognition



Indirect allorecognition



IL2

CD40LG

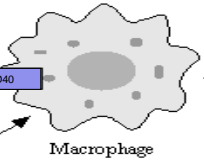
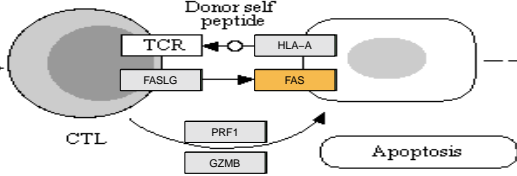
IL4

IL5

IL10

B cell receptor signaling pathway

Rejection



TNF
NO
Cytotoxicity

IFNG

CD40LG

Donor-derived MHC peptide

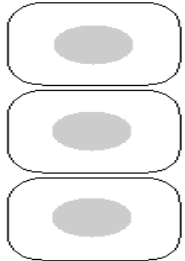
B cell receptor signaling pathway

Alloantibody
Complement-mediated damage
ADC
Complement and coagulation cascades

Allograft destruction

MHC: Donor MHC
MHC: Recipient MHC

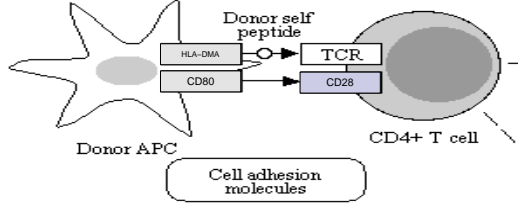
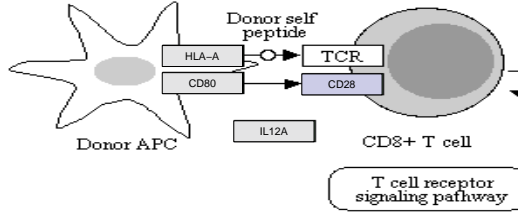
Donor parenchymal graft cells



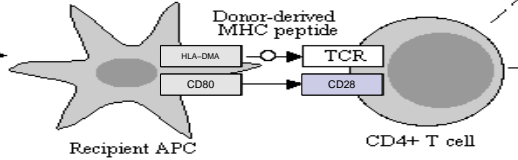
HLA-A
(and minor histocompatibility antigens)

Antigen processing and presentation

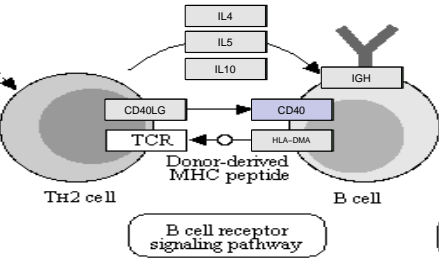
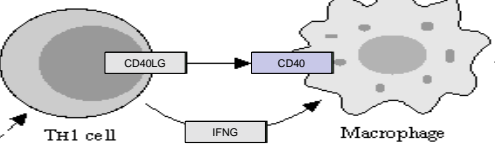
Direct allorecognition



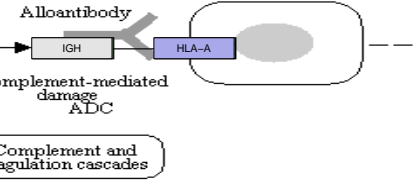
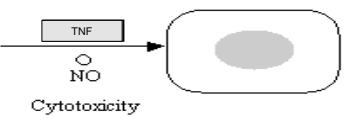
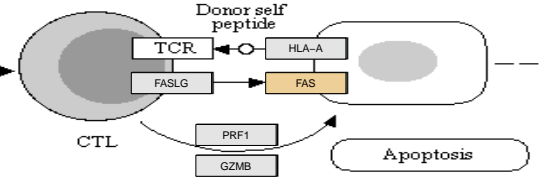
Indirect allorecognition



IL2



Rejection



Allograft destruction