

# Graft Vs Host Disease

Autoimmune/Inflammatory | Umbilical Cord Blood



Graft versus host disease (GVHD) occurs when a transplant of human tissue such as blood or organs from a donor to a recipient is attacked by the recipient's immune system. The results can be chronic, acute or even fatal.

20% to 80% of patients having a donor transplant will develop some degree of graft versus host disease, which typically occurs 21 to 25 days post-transplantation. In acute cases this is 26% to 34% for fully matched grafts and 42% to 52% for partially matched grafts. In chronic cases, this is approximately 30% for fully matched grafts and 60% to 70% for partially matched grafts.

## Clinical Trials

A phase II study at the Karolinska Institute is now being followed up in a European randomised study. No results are available as yet.

There is also a small study published looking at the co-transplantation of mesenchymal stem cells (MSC) with the donor haematopoietic cells that showed some beneficial effect, but the dose and the handling of the MSCs were flagged as critical parameters.

## Patient Studies

MSCs are currently being assessed for treating chronic GVHD. A 19-patient study showed 14 patients in complete or partial remission with no adverse effects, with 5 of these patients able to stop immune suppressive treatments.

## Summary

Initial results using MSCs to treat this are promising, more work is planned to further clarify this.

## References

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[http://marrow.org/Patient/You\\_and\\_Survivorship/Treating\\_Complications/GVHD/What\\_Causes\\_GVHD.aspx](http://marrow.org/Patient/You_and_Survivorship/Treating_Complications/GVHD/What_Causes_GVHD.aspx)

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