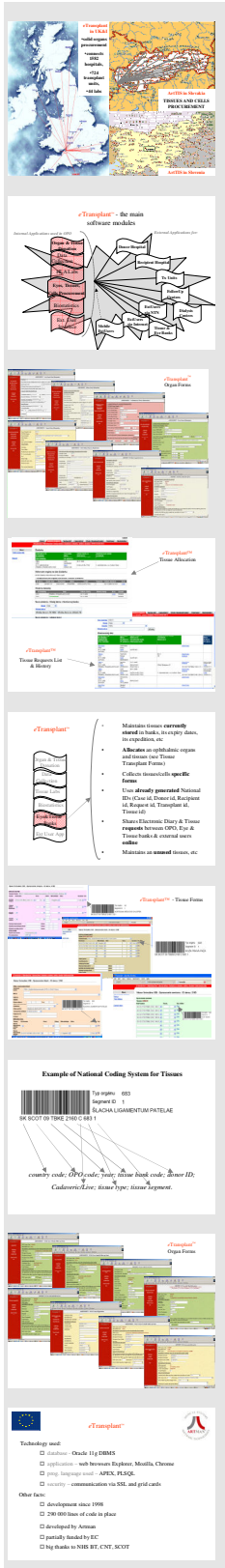# ArtTIS™ - Web based Tissues and Cells Transplant Information Systems

In view of the potential for successful tissue and cells transplantation many countries have established their own transplant services. A fast, highly efficient, reliable and open architecture software system is crucial to providing a 24 hour support service for the harvesting, matching, allocating, distributing and tracing of the donor tissues and cells for transplantation. We are proud to announce that we have developed and delivered such a *National system for Slovak Republic* **(2010)** and *Republic of Slovenia (2011)* connecting all the relevant tissue and eye banks, hospitals, transplant centres, follow up centres and HLA laboratories. This has been a natural evolvement of the solid organs transplant database and applications which Artman has implemented and deployed for **United Kingdom and Republic of Ireland (2003).**

In addition to eTransplant™ we have also developed 3 new versions of the Tissue and Cells Transplant System ArtTIS™ based on the requirements of our customers.

These are:

> *- eTransplant™ - National Transplant Database for Solid Organs, Tissues and Cells*
> *- ArtTIS™ - National Tissues and Cells Transplant Information System*
> *- ArtTIS™ v.DoDIS (Donors and Donations Information System)*
> *- ArtTIS™ v.TEBIS (Tissue, Cells and Eye Bank Internal Systems)*

All of the systems follow the standards set by parent *European 2004/23/EC* directive and its two technical directives *(2006/17/EC and 2006/86/EC)* for regulation of

> procurement,
> testing,
> processing,
> storage,
> distribution,
> traceability,
> import / export

ArtTIS™ (National Tissue and Cells Transplant Information System)

- is a unique computerised Internet based tissue and cells transplant database suitable for **governments and its central procurement authorities** connecting surrounding tissue banks, transplant centres, cell banks, eye banks, HLA, biochemical, microbiological, haematological laboratories and follow up hospitals.

- also brings a new potential to tissue banks and transplant service co-operation, unifies national tissue transplant practices, enable equal access to tissue transplantation on national level, helps guarantee the safety of tissues procedures and traceability of tissues and cells nationally.

- represents a new approach with ability to connect tissue banks into one National database together with solid organ database and links donor registries and recipient waiting lists.

- also helps to unify an international strategy of creating the multinational virtual transplant databases connecting national transplant systems in an appropriate manner for sharing surplus tissues, cells and organs. International registries can also benefit by providing data from a central point to many international clinical studies.

ArtTIS™ DODIS (Donors and Donations Information System)

is a unique web based software which covers all the aspects of **donors and donation processes** of the tissues and cells within the country

ArtTIS™ TEBIS (Tissues, Cells and Eye Banks Internal System)

is a unique web based system which covers all the internal procedures, processes and management of a **single tissue and eye bank.**

Comparison table of the features available:

	eTransplant™	ArtTIS™	ArtTIS™ DODIS	ArtTIS™ TEBIS
Generates IDs and registers solid organs and tissue donors, donations and case details nationally	☺	-	-	-
Generates IDs and registers tissue donors, donations case details nationally	☺	☺	☺	-
Generates and registers its own donor details, donation details, cases and relevant IDs	☺	☺	☺	☺
Procures all solid organs from the donor	☺	-	-	-
Harvests, transports, stores all tissues, cells and eyes from donors into tissue or eye bank	☺	☺	☺	☺
Matches, offers and processes donor solid organs	☺	-	-	-
Processes, manufactures and delivers tissues, cells or corneas to transplant units	☺	☺	☺	☺
Allocates, transplants organs to recipients	☺	-	-	-
Monitors tissue, cells and eyes requests in national electronic diary	☺	☺	-	☺
Registers all tissues, cells and eyes allocations and implantations to recipients	☺	☺	-	☺
Registers and manages national organ waiting lists	☺	-	-	-
Accesses a national storage of all tissues, cells and eyes online	☺	☺	☺	-
Accesses its own virtual storage of tissues, cells and eyes online	☺	☺	☺	☺
Uses the own tissues, cells, eyes coding and labelling system	☺	☺	☺	☺
Links banks with labs, transplant centres and recipient centres	☺	☺	-	☺
Runs internal statistical reports	☺	☺	☺	☺
Links with National Transplant System for Solid Organs	-	☺	☺	☺

Comparison table of the features available:

Links all donor types IDs numbers on national level	☺	-	-	-
Monitors and secures traceability of all tissues exported or allocated	☺	☺	-	☺
Manages data audits and data validations	☺	☺	☺	☺
Monitors adverse reactions, rejections or expirations of tissues and corneas	☺	☺	-	☺
Monitors expirations of tissues and corneas	☺	☺	☺	☺
Manages donor's and recipient's HLA types provided by HLA labs and all lab results	☺	☺	-	☺
Manages donor's HLA types provided by HLA labs and all lab results	☺	☺	☺	☺
Links donors and recipient with haematological, microbiological and biochemical results	☺	☺	-	☺
Links donors with haematological, microbiological and biochemical results	☺	☺	☺	☺
Automatically deducts any disposable materials used by the processing of tissues, cells and eyes from the stock	☺	☺	☺	☺
Generate various quarterly and annual tissue statistical reports for government	☺	☺	-	-
Donor Forms				
Multi Organ/Tissue/Cell Donor Form	☺	☺	☺	☺
Kidney Donor form	☺	-	-	-
Cardiothoracic Donor Form	☺	-	-	-
Liver Donor Form	☺	-	-	-
Ocular Sclera, Cornea Donor Form	☺	☺	☺	☺
Living Kidney Donor Assessment	☺	-	-	-
Transplant Forms				
Kidney Transplant Record Form	☺	-	-	-
Tissue Transplant Protocol	☺	☺	-	☺
Ocular Sclera, Cornea Transplant Form	☺	☺	-	☺
Ocular Tissue Transplant Audit	☺	☺	-	☺
Follow Up Forms				
Kidney 3 Month Follow-up Form	☺	-	-	-
Heart/Lung 3 Month Follow-up Form	☺	-	-	-
Liver 3 Month Follow-up Form	☺	-	-	-
Cornea 3 month Follow-up Form	☺	☺	-	☺
Pancreas 3 Month Follow-Up Form	☺	-	-	-
Heart/Lung Annual Follow-up Form	☺	-	-	-
Kidney Annual Follow-up Form	☺	-	-	-
Liver Annual Follow-up Form	☺	-	-	-
Cornea Annual Follow-up Form	☺	☺	-	☺
Pancreas Follow-Up Form	☺	-	-	-
Liver Audit First Week Form	☺	-	-	-
Ocular Audit 6 Month Follow-up	☺	☺	-	☺
Ocular Audit Annual Follow-up Form	☺	☺	-	☺

Tissue Follow Up Form & Rejection Form	☺	☺	-	☺
Recipient Registration Forms				
Kidney, Pancreas, Liver, Heart, Lung Registration Forms	☺	-	-	-
Ocular Registration Form	☺	☺	-	☺
Tissue, Cell Processing & Transplant Forms				
Tissues & Cornea, Sclera Request & Registration Form	☺	☺	-	☺
Heart Valves Transplant Form (Atrioventricular, Mitral, Tricuspid, Aortic, Pulmonic Valves)	☺	☺	☺	☺
Amnion Transplant Form	☺	☺	☺	☺
Skin Transplant Form	☺	☺	☺	☺
Bones Transplant Form (Sternum, Knees, Hips, Condyle of Tibia/Femur, Tibia, Femur, Ribs..)	☺	☺	☺	☺
Veins Transplant Form (Aorta, Artery, Vena)	☺	☺	☺	☺
Ligaments Transplant Form (Ligamentum Peatelae, Fascia Lata, Ligamentum Achilei)	☺	☺	☺	☺
Cell Transplant Form (Keratinocytes, Chondrocytes, Osteoblasts, Limbal cells)	☺	☺	☺	☺
Stem Cells Transplant Form	☺	☺	☺	☺
Cord Blood Transplant Form	☺	☺	☺	☺
Reproductive Cells Transplant Form	☺	☺	☺	☺
Cartilages Transplant Form	☺	☺	☺	☺
Other Transplant Forms				
Donor/Recipient Organ & Tissue Outcome Form	☺	☺	-	☺
Non Donor Registration Form	☺	☺	☺	☺

We would be delighted to have the opportunity of discussing your requirements and invite you to give us a call or e-mail us for more information. We can also present all of the systems to you live.

Artman Technologies believes it is the right time to share our knowledge and expertise with other tissue and eye banks and procurement organisations and we hope you will find our enclosures of interest.

Citations:

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"Complex information system for management and documentation for organ and tissue transplant program. Stabile, quick and easy accessible through web browser. User friendly application forms. Easy modifications for different user requirements. Slovakia Transplant is on line!"

Daniel Kuba,
Head of Slovak Center for Organ Transplantations, Slovakia.

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"The fastest Matching Run I have seen so far. Impressive performance."

Sue Falvey,
Duty Office Manager, NHS Blood & Transplant, United Kingdom

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"Roman Benedek is fully cooperative at the highest professional and personal level. What is more Roman is always prepared to help, give some piece of advice or react in the most appropriate and flexible way."

Danica Avsec,
Director of Slovenija Transplant

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"Roman Benedek and his team is focused into a task and their will to do it is strong enough to reach the goal. Prepared software on web based technology is modern principle which is used in our case as a National authority for processing and storing database of all authorized tissue establishments in Slovenia. I strongly believe that our partners will be satisfied."

Gorazd Cebulc, Technical Advisor,
Slovenija Transplant, Slovenia

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"Chosen Web technology applications proved to be a visionary solution connecting external users to National Transplant Database from all over the UK and Republic of Ireland.
Applications are extremely user friendly and remarkably stable."

Saifi Hashmi,
Head of IT&Computing, , NHS Blood & Transplant, United Kingdom

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"Comprehensive validation of all records prior to their being committed to the database is in place and the applications are designed to ensure that the management has complete control over all aspects of the validation process."

David Shute,
Director of Operations, NHS Blood & Transplant, United Kingdom

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"Absolute accuracy of data stored in the database is of paramount importance to our work and the design of the applications ensures that this objective is achieved."

Andy Maxwell,
Data Executive Manager, , NHS Blood & Transplant, United Kingdom