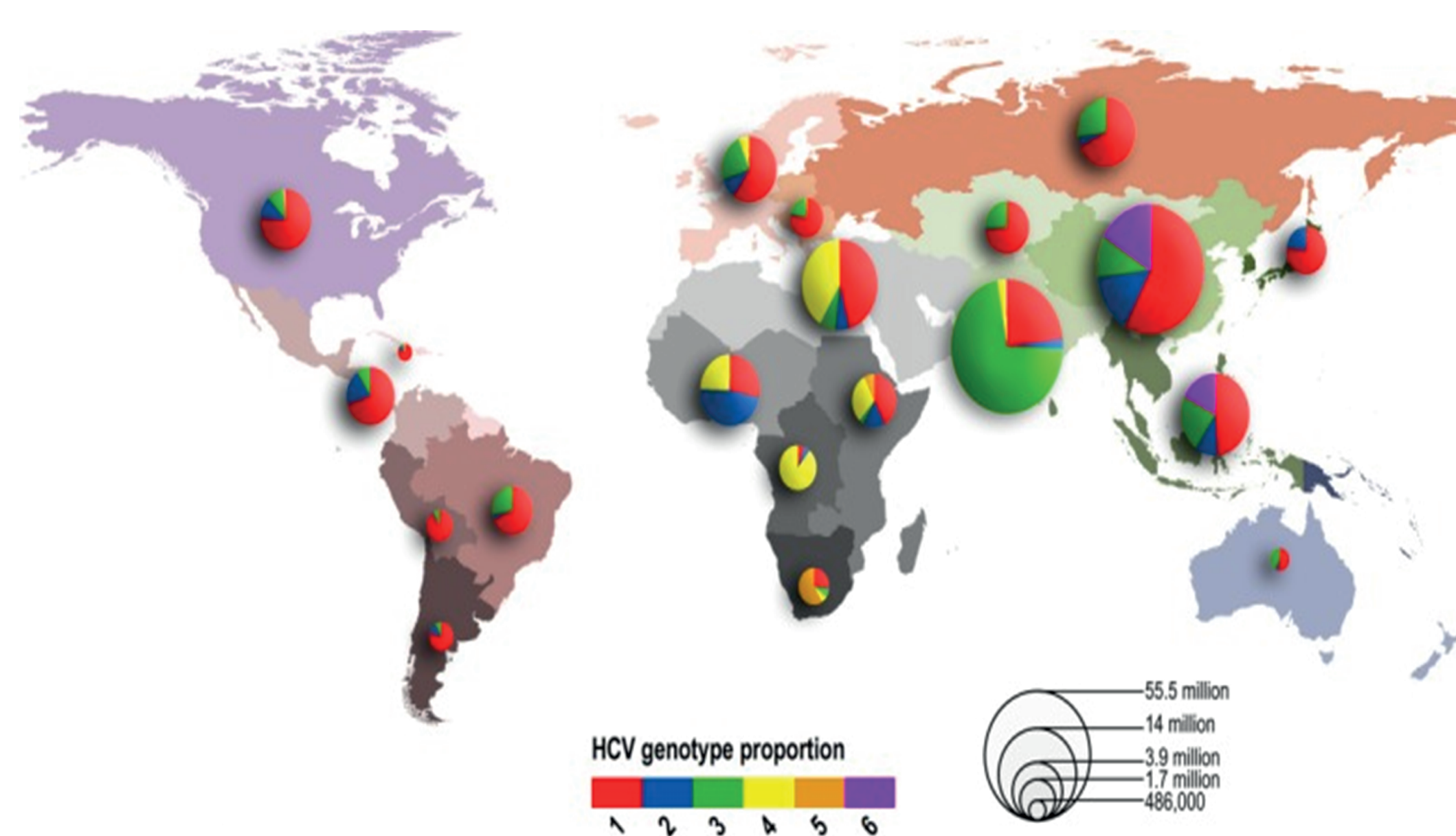


# NOVEL ANTISENSE PLATFORM TECHNOLOGY FOR VIRUS ERADICATION

## CHRONIC HEPATITIS C VIRUS INFECTION

- Affects ~3% of the world's population
- One of the major priorities in public health (WHO)
- Leading cause of liver cirrhosis and liver cancer
- One of the key indications for liver transplantation
- There are 7 identified HCV genotypes
- Only one is currently up for medical treatment



## Achievements

- To develop Locked-in Antisense technology targeting the coding region of HCV
- Genecode's LNA/DNA technology can be applied to all HCV genotypes
- Genecode successfully validated its target selection platform
- Genecode demonstrated the beneficial effects of 8-oxo-dG on antisense stability and antiviral activities

## Description of Mode of Action

### 8-OXO-2'-DEOXYGUANOSINE (8-oxo-dG)

Occurs naturally due to oxidation of guanosine residues, present in all cells. Genecode discovered that 8-oxo-DG has surprising stability-promoting effects. And improves duplex formation with target RNAs. This technology has potential to develop sustainable treatment for chronic HCV infection.

## GENECODE PLATFORM TECHNOLOGIES PATENTS:

US Patent no., US 7,786, 292 B2, Date of Patent Aug. 31, 2010, European Patent No EP2013044, Aug. 29, 2012

### "ANTISENSE AGENTS COMBINING STRONGLY BOUNDING BASE-MODIFIED OLIGONUCLEOTIDE AND ARTIFICIAL NUCLEASE"

**The diseases**, targeted by this GENECODE Patent protected inventions are listed in the background information of the Patent:

The specific binding of antisense oligonucleotides to the DNA or RNA targets can inactivate the replication, transcription, or translation of nucleic acids, thereby providing mechanism for controlling diseases such as cancer and viral infection. The binding of antisense oligonucleotide to a target can be thus used to alter gene expression, in variety of circumstances, e.g. to interfere with viral life cycles, or the growth of cancerous cells.

## PARTNERING OPPORTUNITIES

Looking for development partners!  
Contact person:  
**Mehis Pilv**  
mehis.pilv@gmail.com

GENECODE LTD, WTC Tallinn  
Ahtri street 8, 10151, Tallinn  
ESTONIA  
www.genecode.com