Resistance testing is meanwhile “standard of care”. Different projects such as AREVIR, the „Verbundprojekt Monitoring von resistenten HIV mit RESINA und der RKI Serokonverter-Analyse“ contribute to better interpretation systems and analyze the risk of transmission of resistant HIV in Germany. On a European level the results of AREVIR and RESINA are integrated into the EURResist project together with the Karolinska and ARCA data and recently other European partners (www.euresist.org). Our aim is the prediction of the most likely best working drug combinations. For that reason, geno2pheno-THEO (www.genafor.org) was developed and meanwhile integrated into the EURResist prediction tool which is also freely available via internet. Nevertheless we need to understand the contribution of each resistance associated mutation and we have to agree on strategies for resistance testing and interpretation. These are the aims of HIV-GRADE (www.hiv-grade.de).

New drugs in new classes require equivalent diagnostics. Within HIV-GRADE and geno2pheno such new interpretation tools have been developed. This includes the prediction of the co receptor usage prior to therapy with co receptor blockers like maraviroc and resistance to integrase inhibitors like raltegravir.

For HBV the technical expertise from the HIV-projects could be adapted, so that interpretation systems are already available. Geno2pheno and HIV-GRADE predict resistance, (sub-) genotype and escape mutants. In the near future we will have to deal with resistance to anti-HCV drugs and need appropriate tools for interpretation too.

For HCV-therapy a new era has been entered with the availability of direct antiviral agents (DAAs). The protease inhibitors boceprevir and telaprevir are on the market already and polymerase inhibitors are coming soon. Interpretation systems for the prediction of therapy success are needed and geno2pheno[HCV] as well as HIV-GRADE are meeting this challenge.

Since 2000 the meeting is an exchange platform for clinicians, bioinformaticians and virologists. Participants have the chance to discuss clinical cases with other experts – the fasta file of the relevant case from HIV, HBV, HCV and clinical information is needed, while the interpretation systems can be utilized online at the meeting. The suppliers of the commercial systems will also be present. Furthermore, protocols are available at the meeting and will be visible on the internet after the meeting under www.genafor.org.

The language of the meeting is English.
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<td>Opening Remarks U. Benjamin Kaupp / Stiftung Caesar</td>
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<td>09:15-11:30</td>
<td><strong>HOPE and state of ART in HBV/HDV</strong></td>
<td>Ulrike Protzer, Jens Verheyen</td>
<td>Dieter Glebe, Maria Neumann-Fraune, Bastian Beggel, Michael Chudy, Valentina Svicher</td>
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<td>11:30-11:45</td>
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<td>11:45-13:30</td>
<td><strong>PEPSI and state of ART in HCV</strong></td>
<td>Johannes Bode, Saleta Sierra Aragon</td>
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<td>14:30-15:30</td>
<td>HIV-1 viral load determination and therapeutic consequences?</td>
<td>Patrick Braun, Rolf Kaiser</td>
<td>Charlotte Charpentier, Martin Obermeier</td>
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<td>HCV viral load determination and therapeutic consequences?</td>
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<td>14:30-15:30</td>
<td>HIV-1 and HIV-2 diagnostics and therapy - state of ART,</td>
<td>Ricardo Camacho, Diane Descamps</td>
<td>Charlotte Charpentier, Martin Obermeier</td>
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<td>HIV-2 Algorithm (HIV-GRADE / CHAIN activities)</td>
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<td>16:30-17:00</td>
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<td>17:00-18:00</td>
<td><strong>NGS (Next Generation Sequencing) and diagnostics</strong></td>
<td>Martin Däumer, Karin Metzner</td>
<td>Niko Beerenwinkel, Alex Thielen, Francesca Ceccherini-Silberstein</td>
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Friday, 04.05.2012

9:00 – 9:15  Patient’s view

9:15 – 11:30  EuResist

Chairs:  Francesca Incardona, Thomas Lengauer

EuResist present and future:
The EuResist database and interpretation system
HIV resistance, treatment perspectives and data collection in
Russia, Ethiopia, India, Tanzania, South Africa

11:30 – 11:45  Coffee break

11:45 – 13:30  RESINA and RKI-seroconverter study

Chairs:  Dieter Häussinger, Herbert Pfister

Speakers:  Mark Oette, Alejandro Pironti, Claudia Kücherer, Klaus Jansen,
Stefan Esser, Finja Schweitzer, Björn Jensen

13:30 – 14:30  Lunch

14:30 – 16:30  HIV-1 tropism determination and therapy consequences

Chairs:  Nadine Lübke, Hauke Walter

Speakers:  Martin Obermeier, Thomas Klimkait, Chris Verhofstede, Eva Heger,
Nico Pfeifer

14:30 – 16:30  Workshop sessions part 1
HIV-resistance and tropism diagnostics and therapy consequences
HBV resistance and escape
HCV resistance

16:30 – 17:00  Coffee break

17:00 – 18:00  Workshop sessions part 1
HIV-resistance and tropism diagnostics and therapy consequences
HBV resistance and escape
HCV resistance

18:00  Summary of the workshops and closing remarks

Rolf Kaiser
The Meeting is kindly supported by:

**ViiV Healthcare, Abbott, Roche, Boehringer Ingelheim, Tibotec, Bristol-Myers Squibb, Gilead, Siemens, MSD Sharp & Dohme, Essex,**

The meeting will be certified from the Ärztekammer Nordrhein with credit points.

The Meeting is organised by genafor e.V.

Organising committee:

Björn Jensen, Daniel Hoffmann, Thomas Lengauer, Francesca Incardona, Maurizio Zazzi, Anders Sonnerborg, Jens Verheyen, Mark Oette, Rolf Kaiser and Claudia Müller

Not all Chairs and speakers have confirmed, so that the program is preliminary