

ABL and Evivar Medical for Strategic Partnership and Alliance in HIV and Hepatitis

Conférence de Presse ABL SA - Chambre de Commerce de Luxembourg - Mardi 29 Septembre 2009, 18h

Annonce de Presse

“ABL and Evivar Medical Enter into Agreements to Form a Global Strategic Partnership and IP Cross-Licensing for Disease Management and Personalized Healthcare of Hepatitis B and HIV Infections”

BusinessWire, 18h00 Luxembourg (12pm ET), 29 Sept. 2009

Advanced Biological Laboratories (ABL) SA

- ABL a été créée comme une spin-off du CRP-Santé, Laboratoire de rétrovirologie (2000) avec à ce jour un effectif de 25 personnes dans le monde
- ABL a comme actionnaires la CD-PME (SNCI), EUREFI et TechnoWal (SRIW) et des investisseurs privés, et a pu bénéficier du support du Ministère de l'Économie pour le développement de sa plate-forme informatique TherapyEdge™ / ViroScore® Suite
- ABL acquis en 2004 une société américaine, TherapyEdge Inc.
- ABL développe des solutions informatiques de médecine personnalisée pour le VIH/SIDA, la tuberculose, les hépatites virales
- A ce jour plus de 75 hôpitaux et centres de recherche utilisent la solution TherapyEdge™ / ViroScore® Suite
- ABL souhaite s'engager dans les maladies chroniques comme le diabète, les maladies cardio-vasculaires, l'hypertension ainsi que l'oncologie
- ABL possède à ce jour 4 brevets et continue l'extension de ce portefeuille soit par des dépôts, des acquisitions ou des partenariats

EVIVAR Medical

- Evivar Medical (Evivar) is a joint venture company established in 2006 between Melbourne Health (Australia) and ATF Group
- Evivar is an on-line therapy management company delivering real time predictive decision support services to clinicians treating patients suffering from chronic HBV enabling them the right medication at the right time for their patients
- Evivar enables physicians to individualize the treatment of patients with CHB by selecting the right drug, at the right time, in response to the mutations diagnosed. The ultimate result is an increase in the overall health and longevity of patients and a reduction in the treatment costs
- Evivar and its consortium partners have built an extensive patent portfolio which includes recent discoveries associated with multiple pathways of evolution of HBV drug-resistance as well as cross-resistance and multi-drug resistance

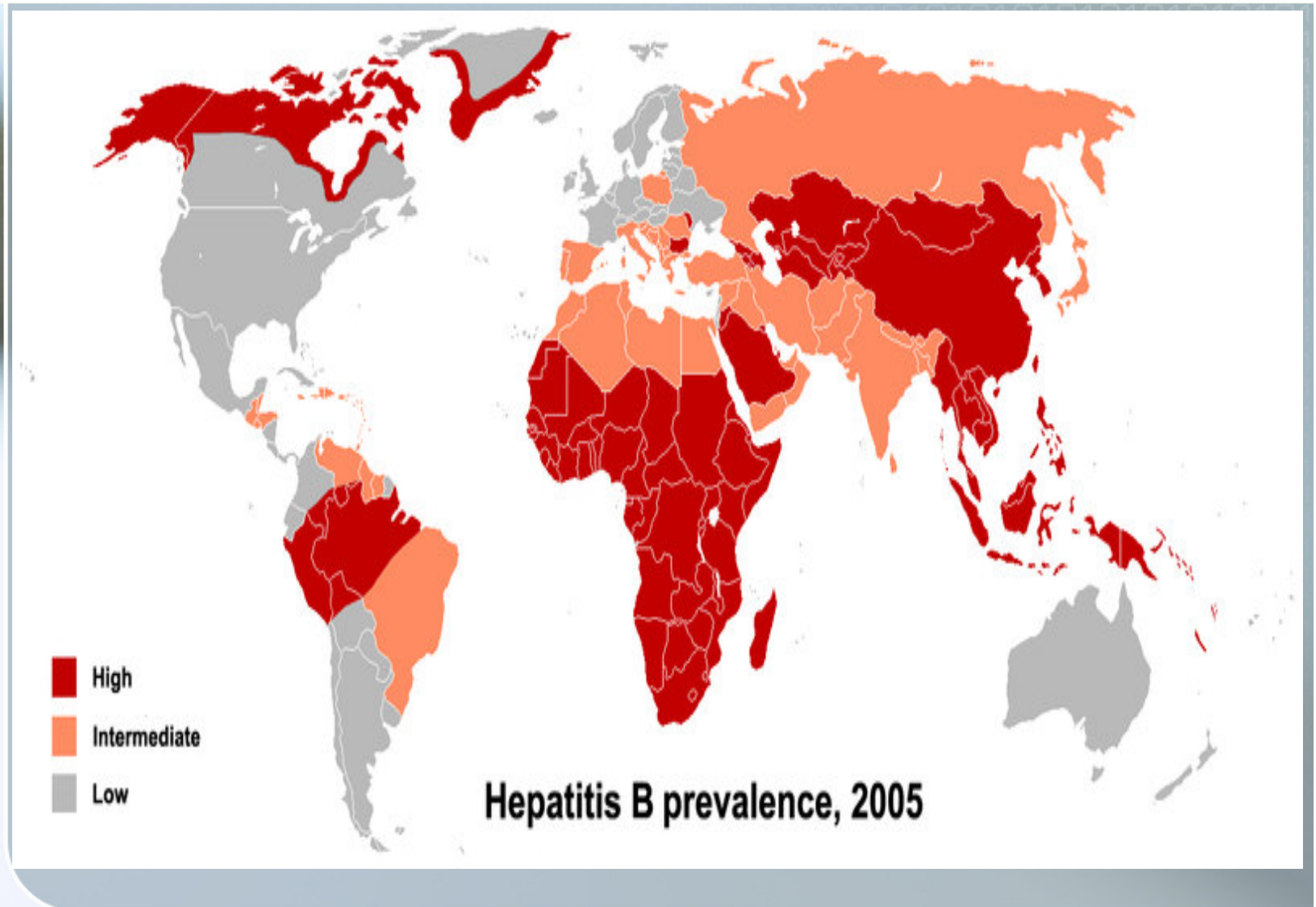
Liste des brevets ABL-EVIVAR

- US patent 6,081,786 and foreign applications
- US patent #6,188,988 and foreign applications
- US patent # 6,063,028
- US patent # 6,317,731
- USA Patent 6,555,311
- Patent Application USA 09/958,503
- Patent Application USA 10/297,664
- Patent Application USA 10/911,464
- Patent Application USA 10/963,333
- PCT Patent Application PCT/AU 2004/001440
- Australian Patent Application 2004905615
- Australian provisional Patent Application 2005901757
- PCT filed based on Australian Provisional 2005905862
- Australian Provisional 2006903065

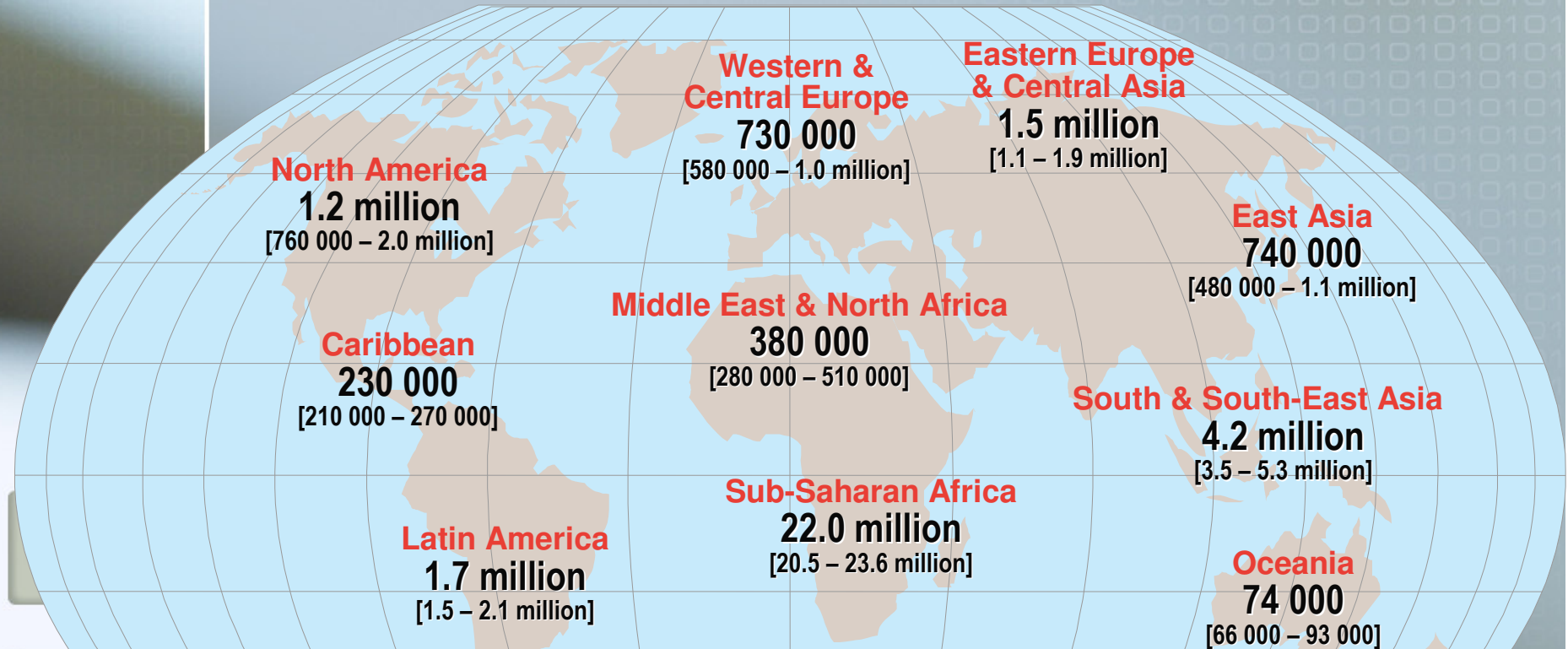
Hépatite B

- L'hépatite B est une infection virale s'attaquant au foie. Elle est à l'origine d'une morbidité grave et chronique
- Environ deux milliards de personnes infectées
- 350 millions vivent avec une atteinte hépatique chronique
- 600 000 personnes environ en meurent chaque année.
- Le risque de décès par cirrhose ou cancer du foie dus au virus de l'hépatite B est approximativement de 25% chez le porteur adulte chronique si l'infection a eu lieu pendant l'enfance.
- Le virus de l'hépatite B est 50 à 100 fois plus infectieux que le VIH.

Prévalence Hépatite B (2005)



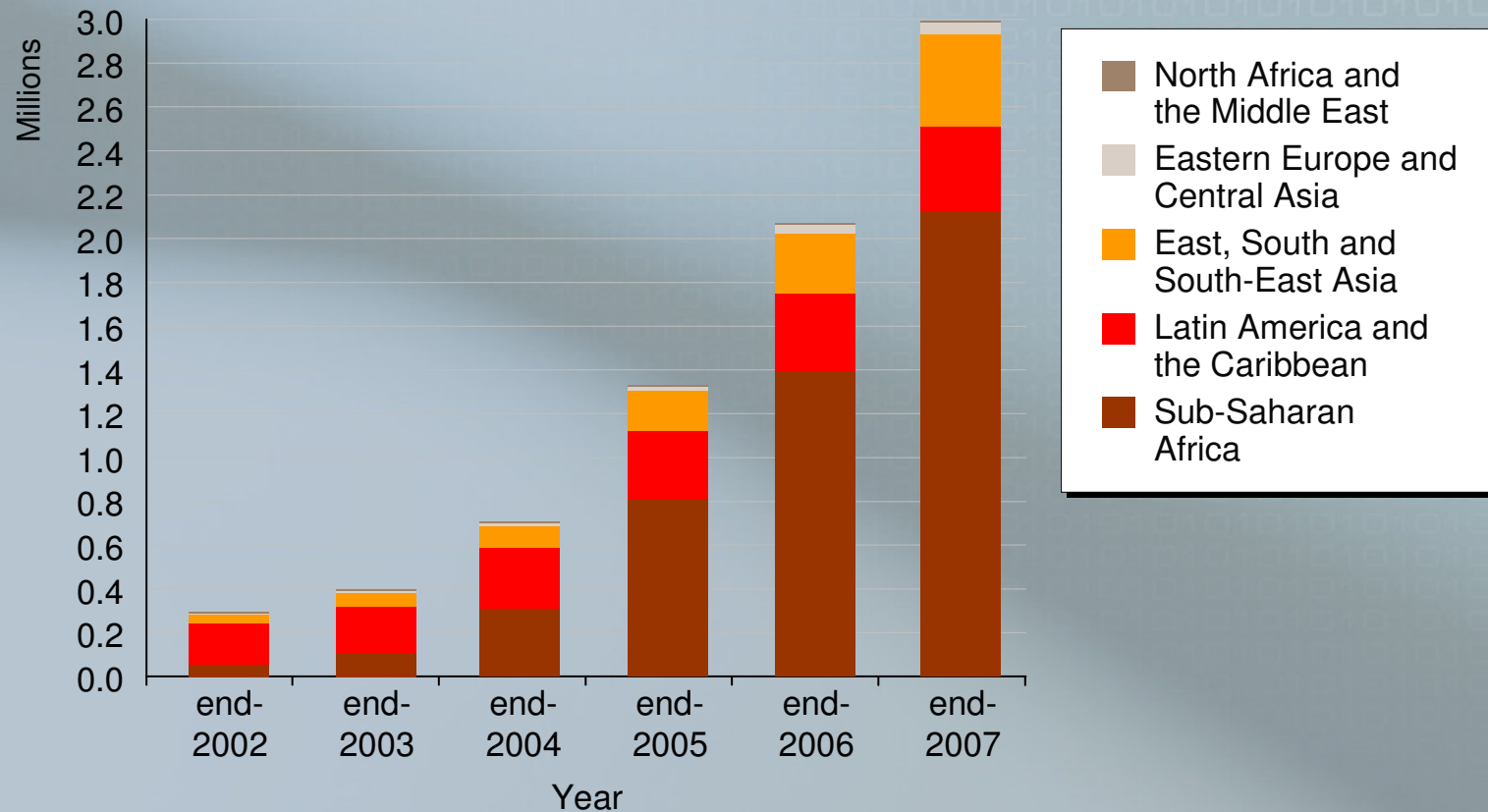
Infection VIH/SIDA (fin 2007)



- **Personnes infectées par le VIH : 33.0 millions**
- **Nouvelles infections VIH : 2.7 millions**
- **Morts liées au SIDA : 2.0 millions**

Les traitements anti-VIH (1)

- 3 millions de personnes traitées (fin 2007)



Source: Data provided by UNAIDS & WHO, 2008.

Les traitements anti-VIH (2)

- Objectif de **6.7 millions** de personnes traitées fin 2010

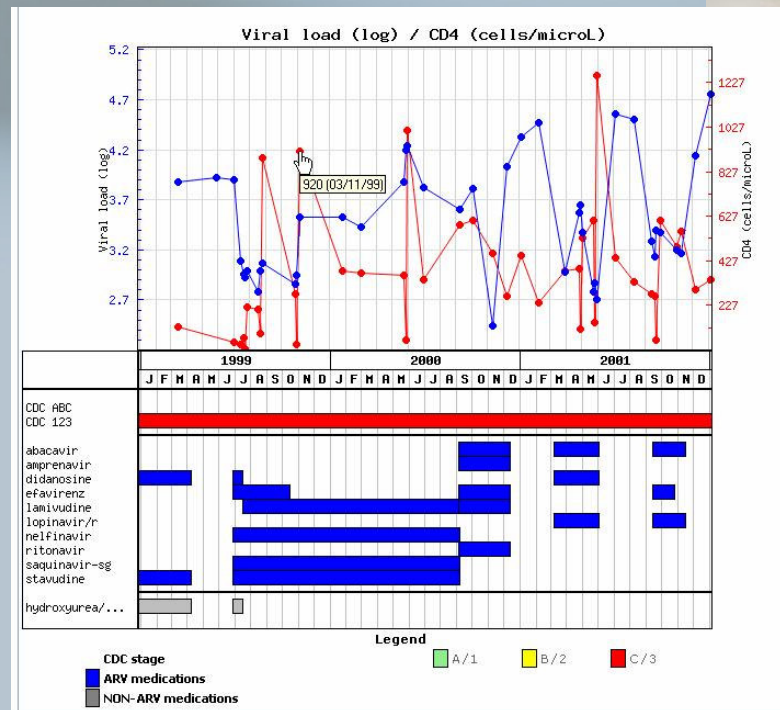
Table 3: Expected outcomes and impacts if full investments were made on country-defined targets in 132 low- and middle-income countries by 2010 (million)

| | |
|--|---------|
| Number of new HIV infections averted (2009-2010) | 2.6 |
| Number of deaths averted (2009-2010) | 1.3 |
| People on antiretroviral treatment | 6.7 |
| Primary school teachers trained | 1.0 |
| Sex workers reached | 7.5 |
| Voluntary counselling and testing | 40.9 |
| Condoms provided | 8,153.7 |
| Workers reached in the workplace | 46.2 |
| Units of safe blood produced | 42.6 |
| Pregnant women offered comprehensive prevention of mother-to-child transmission services | 74.5 |
| Injecting drug users reached with harm-reduction programmes | 9.6 |
| Men who have sex with men reached | 20.4 |
| Prisoners reached | 6.2 |
| Safe injections provided | 4,247.1 |
| Male circumcisions performed | 1.5 |
| Orphans supported | 6.7 |
| People receiving treatment for opportunistic infections and palliative care | 2.1 |



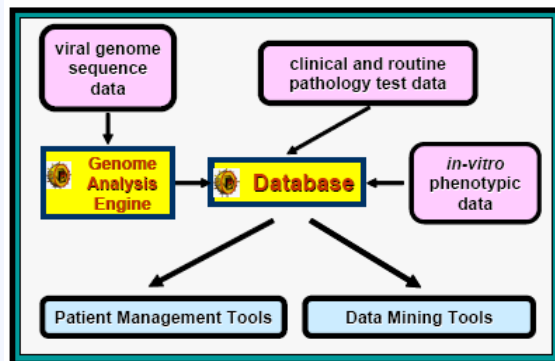
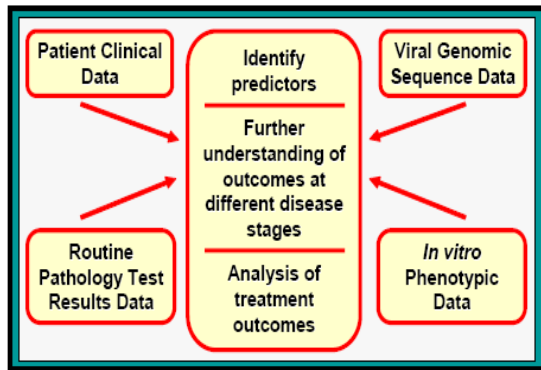
Produits & Services

TherapyEdge (ABL)
Logiciel Clinique (VIH, VHB, ...)



Produits & Services

SeqHepB (Evivar) Logiciel Virologique VHB



Virology Laboratory Report

HBV Genotyping Report

| | |
|-----------------|---------------------------------------|
| Generation Date | 18/10/2007 |
| Generation Time | 11:51 |
| Program Version | SeqHepb Ver:11.12 08:45 8th June 2007 |

| Patient ID | Tester | Login User | Lilly Yuen |
|-------------|------------|------------|---|
| Sample ID | 12345678 | Send To | Evivar Medical Pty Ltd |
| Sample Date | 01/10/2007 | | Suite 501 100 Victoria Parade East Melbourne, Australia 3002 Country code: AU |

Submitted Sequence

| | |
|--|-------------------------------------|
| HBV genome regions recognised and analysed | RT amino acid positions - 72 to 278 |
|--|-------------------------------------|

Results

| | | |
|--------------------------------------|--|--------------------------------|
| HBV Genotype | D as defined by GenBank accession: X02498 | |
| Unique Reverse Transcriptase Changes | rH128Q, rV142G, rL180M, rS202G, rM204V, rG216S, rI257H | |
| Clinically Significant Changes | rL180M, rS202G, rM204V | |
| Resistance Associated Mutations | Nucleos(t)ide analogues | Antiviral agent susceptibility |
| rL180M, rS202G, rM204V | Entecavir | RESISTANT |
| rL180M, rM204V | Lamivudine | RESISTANT |
| rL180M, rM204V | Telbivudine | RESISTANT |
| rL180M, rM204V | Entecavir | Reduced sensitivity |

Comments

| | |
|--------------------------------|--|
| Previous Drug History | No drug history available. |
| Clinically Important Mutations | Sequence analysis of HBV polymerase showed the changes from the reference sequence rL180M, rS202G and rM204V which are associated with Lamivudine, Telbivudine and Entecavir resistance. |
| | Sequence analysis of HBV polymerase showed the changes from the reference sequence rL180M and rM204V which are associated with Lamivudine and Telbivudine resistance. These changes are also associated with reduced sensitivity to Entecavir. |
| | Sequence analysis of HBV polymerase showed no changes associated with Adefovir or Tenofovir resistance. |

Produits & Services

ViroScore Suite (ABL) Logiciel Virologique VIH



Mutation list (Resistance mutations compared with strain HXB2 are in bold)

Reverse transcriptase T39A, M41L, D67D, R83K, Q102K, K103N, V108*, V108I*, V118I, K122E, P133P, C162S, V178I, M184V, V189*, S191S, T200K, L210W, R211K, T215Y, K219K, K223Q, L228R, R277K, S322T

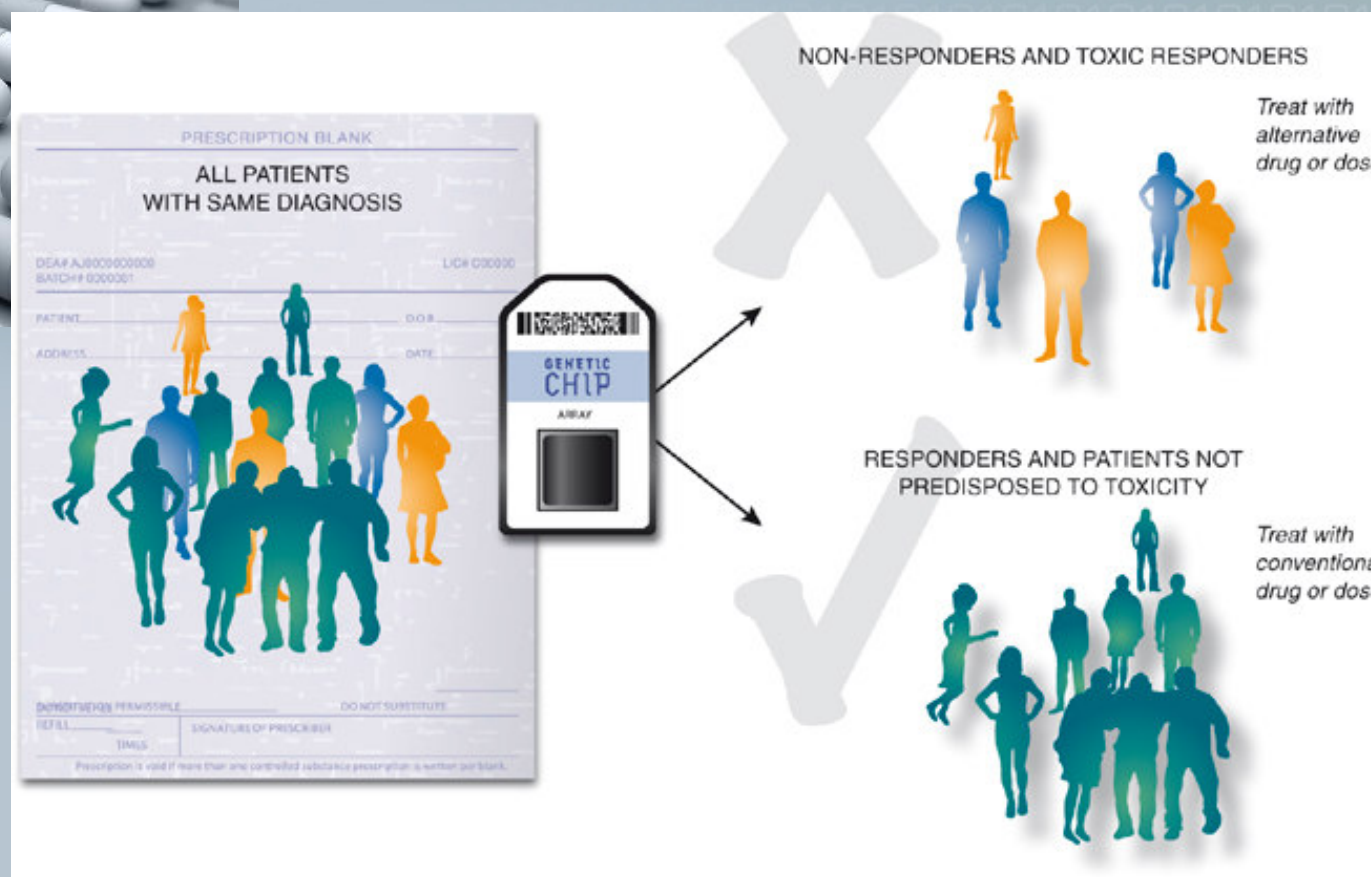
Protease V3I, L10I, Q18H, L19I, L33F, E35*, E35D*, E35N*, H36I, S37E, M46I, I54V, D60E, Q61E, I62V, L63P, A71T, I72T, G73S, V82F, L90M, I93L

(*): ambiguous codon

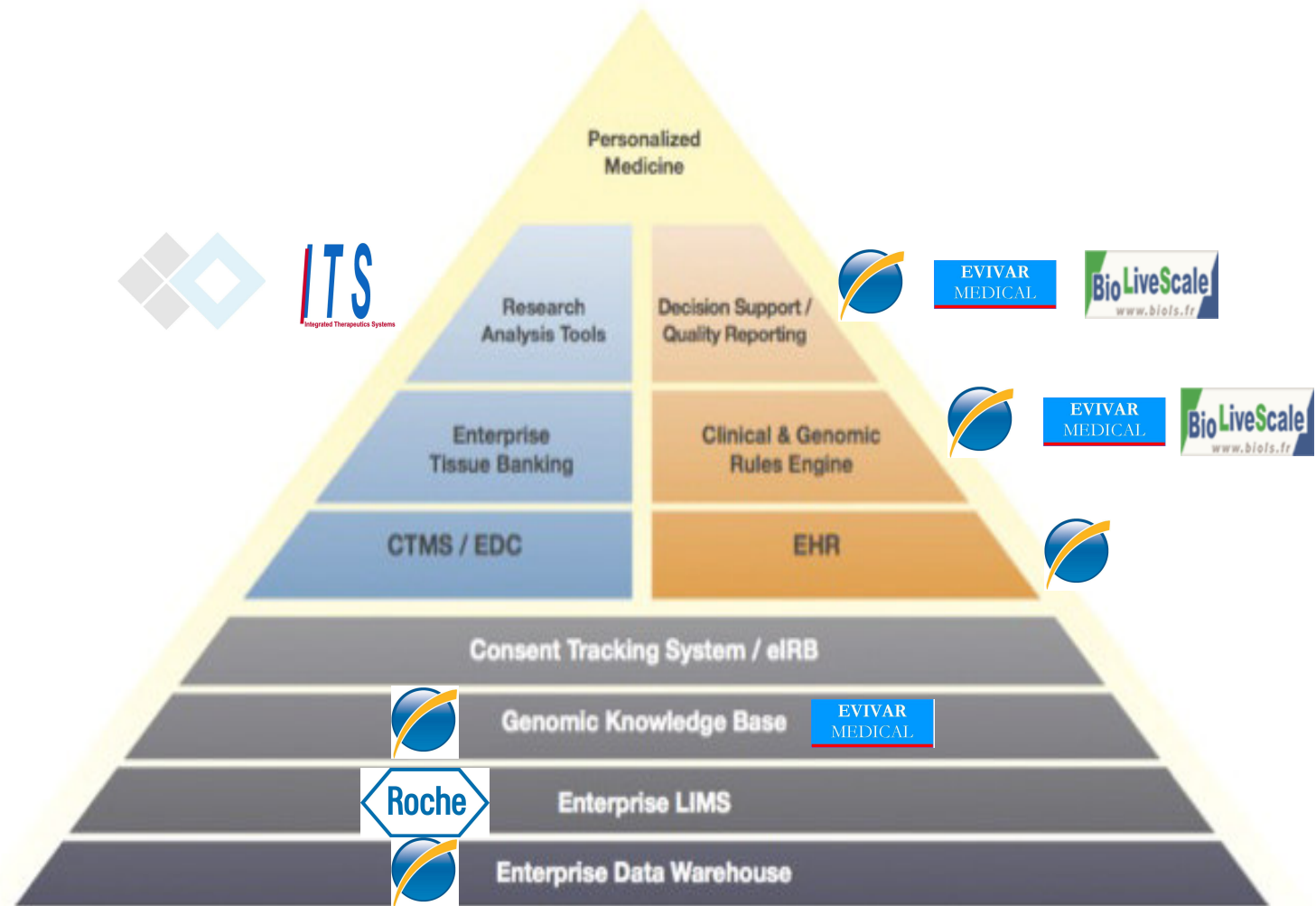
| Class | Drug | ANES 12-09/04 | DMC 01/04 | GAV 11/04 | CHL v5.0-11/04 | BEGA v5.3-09/04 | STAN v4.0-10/04 |
|---------------|---------------|------------------|--------------|------------------|-------------------|--------------------|--------------------|
| NRTI | Zidovudine | R | R | R | Partially active | R | R |
| | Zalcitabine | na | R | R | na | I | na |
| | Didanosine | S | R | I | Partially active | I | R |
| | Stavudine | R | R | R | Partially active | I | R |
| | Lamivudine | R | R | R | Inactive | R | R |
| | Emtricitabine | R | na | na | Inactive | R | R |
| | Abacavir | I | R | R | Inactive | I | R |
| | Tenofovir | I | S | R | Inactive | S | R |
| NRTI | Nevirapine | R | R | R | Inactive | R | R |
| | Delavirdine | na | R | R | na | R | R |
| | Efavirenz | R | R | R | Inactive | R | R |
| PI/Boosted PI | Indinavir | R | R | R | Inactive | na | R |
| | Indinavir/r | na | I | R | Inactive | R | na |
| | Saquinavir | na | R | R | na | na | R |
| | Saquinavir/r | R | na | R | Inactive | R | na |
| | Ritonavir | na | R | R | na | R | R |
| | Nelfinavir | R | R | R | Inactive | R | R |
| | Amprénavir | na | R | R | na | na | R |
| | Amprénavir/r | S | na | R | Inactive | R | na |
| Lopinavir/r | R | R | R | Partially active | R | R | |
| Atazanavir | na | I | R | Inactive | R | R | |
| Atazanavir/r | R | na | na | Inactive | R | na | |
| Tipranavir | na | na | na | na | na | na | |
| Tipranavir/r | S | S | na | Inactive | I | na | |

not available Susceptible/Active Possible resistance/Partially active Resistance/Inactive

Médecine Personnalisée



Médecine Personnalisée



Remerciements

- BioHealth, le Cluster des Sciences et Technologies de la Santé, animé par Luxinnovation
- CRP-Santé
- Ministère de l'Économie du Luxembourg
- CD-PME (SNCI)
- EUREFI
- TechnoWal