

# BIOGARD

## PHARMACEUTICAL HEALTHCARE RECORD

PATIENT CENTRIC PHARMACEUTICAL CARE SERVICES



*The care that protects you & your beloved™*

APHOTECH  
OPRUM

# COMPANY PRESENTATION



## COMPANY BUSINESS DEFINITION AT A GLANCE

# OPRUM



Is the first European company in launching a Smart Health Card according to International Guidelines to deploy Patient Care Services in the environment of Community Pharmacy

AphoTech™ is an IBM Cloud platform Omnichannel-SoftLayer infrastructure upon which the Pharmaceutical care services are deployed for monitoring, screening and follow-up patients.



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**OPRUM**  
HEALTH HOLDING



# APHOTECH HEALTHCARE SOLUTION

FOR GOVERNMENT AND PHARMACY CARE PROVIDERS

# APHOTECH



The citizens expect better quality in the delivery of care, and governments and private organizations seek to achieve better efficiency and cost savings. To help answer those needs AphoTech™ designed an end-to-end solution for the healthcare market.

Our solution allows governments, private healthcare providers and patients to save time and money by enabling monitor tracking and health management. Our solution enables both accountability of monitoring and screening pathologies, and security and confidentiality of the supplied medicine and personal data of the patients.

AphoTech™ offers an end-to-end solution which consists in digital or physical BioCard enrollment, and credentials issuance, and private value-added applications management, and secure storage. Furthermore, we provide dedicated follow-up BioCard services tailored to the customer's requirements.



## MEETING THE CITIZENS MARKET NEEDS EMPOWERING HEALTH

Through streamlined solutions, AphoTech is achieving the equation between new technologies and rational usage of health data through qualified health professionals:

- Patient and professional identity management, from the paperless application process to the management of the credentials' lifecycle
- Digital rights verification giving access to treatment and medicines
- Digital invoicing and mobile payment
- Secure management of clients, patients, clinical and personal data

## APHOTECH KNOW HOW

A unique range of services is provided by AphoTech Platform:

MONITORING



CONSULTATION



SCREENING



ANALYTICAL DATA



GENETIC DRUGS

## STANDARDS FOR QUALITY OF PHARMACY SERVICES

### GOOD PHARMACEUTICAL PRACTICE

GPP is defined as "the practice of pharmacy that responds to the needs of the people who use the pharmacists' services to provide optimal, evidence-based care. To support this practice it is essential that there be an established national framework of quality standards and guidelines."





# BIOCARD INSTANT ACCESS

## YOUR IDENTITY IS THE KEY TO YOUR HEALTH CARE

### Fingerprint Scanner means Security and Instant Access

Security has been upgraded to give you personalized health. You can now unlock your health and make more secure and realible pharmacy services with the swipe of your finger. The system recognize who you are and what monitoring programm you need for today regardless of the Pharmacy location. When purchasing health within AphoTech Services, you can use your fingerprint to access liquid health, instead of entering your account password in a reliable and quick way.



A truly ecosystem of integrated wireless Medical Devices allows empowering the patients across their health.



## BIOMETRIC HEALTHCARE SMARTCARD

# BIOCARD

Adaptable to your needs, AphoTech™ BioCard is available as:

- Digital healthcare patient card
- Electronic healthcare professional badge



## FLEXIBILITY AND ADAPTABILITY

We offer a choice of different card uses to meet a variety of healthcare needs regarding lifetime, personalization modes, and convenience for the sending and medical consultation by professionals:

- Based on the Smart Card (ID1 format) form factor
- Contact, NFC, contactless or dual mode
- High Resistant PVC for laser or color printing

## SECURITY AND STANDARDS

The AphoTech™ BioCard conforms to the latest standards in terms of security and Cloud applications:

- ISO compliance 27001/779 health data. ISMS (Information Security Management Systems)
- Open standards for value-added applications development : Javacard, IBM Cloud Foundry and SOA architecture
- Compatible e-EHIC (Electronic European Health Insurance Card)

However, it goes beyond these standards by offering the potential to integrate digitally the aggregate information of the WHO/FIP Health Improvement Card to prevent Non Communicable Diseases, empowering individuals to work with their health professionals to establish personal health goals and to track their progress over time.

## BIOCARD CARE SMART BENEFITS

Efficiency is the main goal:

- of pharmaceutical services to improve medical care quality
- of technical solutions to ease medical care and drug control
- of the administrative entities to reduce their costs

But it must not be made at the expense of the medical data privacy. The patient is in the heart of the medical system and must be granted access to his personal data in a simple and easy way.

BioCard healthcare card is the answer to these concerns:

## APPLICATION FOR END USERS

Smart BioCard applications that can be implemented in the card post-issuance process include:

- Storage of emergency data: blood type, known allergies, organ donor status, chronic diseases, familiar telephone...
- Pharmacy real-time consultation, lifestyle and chronic guidance
- E-prescription, Health Register, Analytics and Medication

- Privacy: the BioCard technology is virtually impossible to be counterfeited due each ID.Code is exclusive and thus act as a safe-box where all private data is stored without fear of violation
- Security: Access login control mechanisms and cryptographic services grant the access to privacy data and by digitally signing seal electronically a document with a legal value
- Cost effectiveness: BioCard healthcare card provides digital services that lead to the paperless workflows and consequently to large scale cost reduction
- Flexibility: The capability to change, update data and add services over the platform provides a high level of customization and flexibility and leads to a better quality of pharmaceutical care by improving the patient screening and follow-up.

# BIOCARD

 Your secure health data at a glance

We offer different kinds of services to address the unique needs of each customer with different kinds of *Health Cards* called BioCard Classes:



**BIOCARD Genomic**

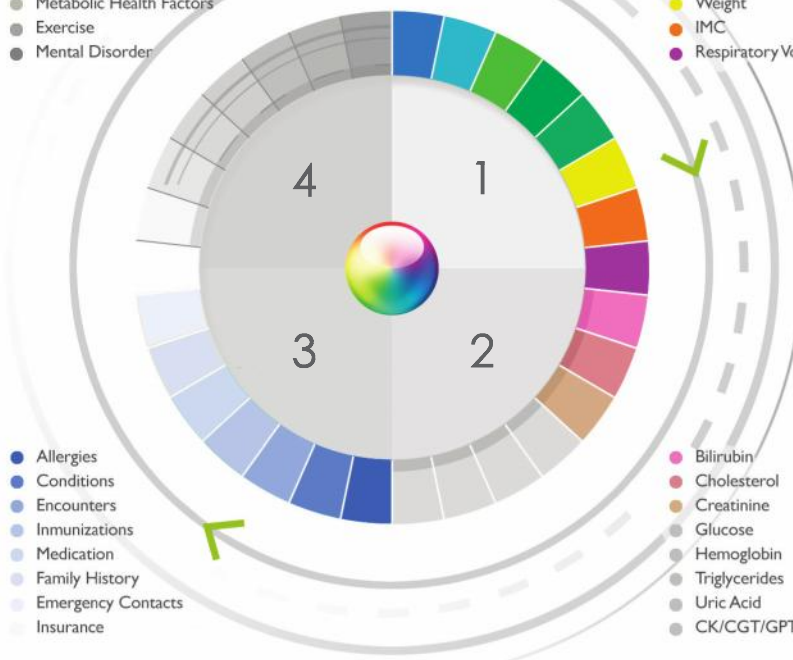
**Genomic Map**

- Body and Weight
- Eating Behaviors
- Diet Recommendation
- Food Reactions
- Nutrition
- Metabolic Health Factors
- Exercise
- Mental Disorder

**BIOCARD Standard**

**Vitals**

- Heart Rate
- Breath Rate
- Blood Pressure
- Temperature
- Blood Oxygen
- Weight
- IMC
- Respiratory Volume



SAMSUNG Gear S2 classic

**BIOCARD Premium**

**Health Data**

**BIOCARD Advanced**

**Analytics**

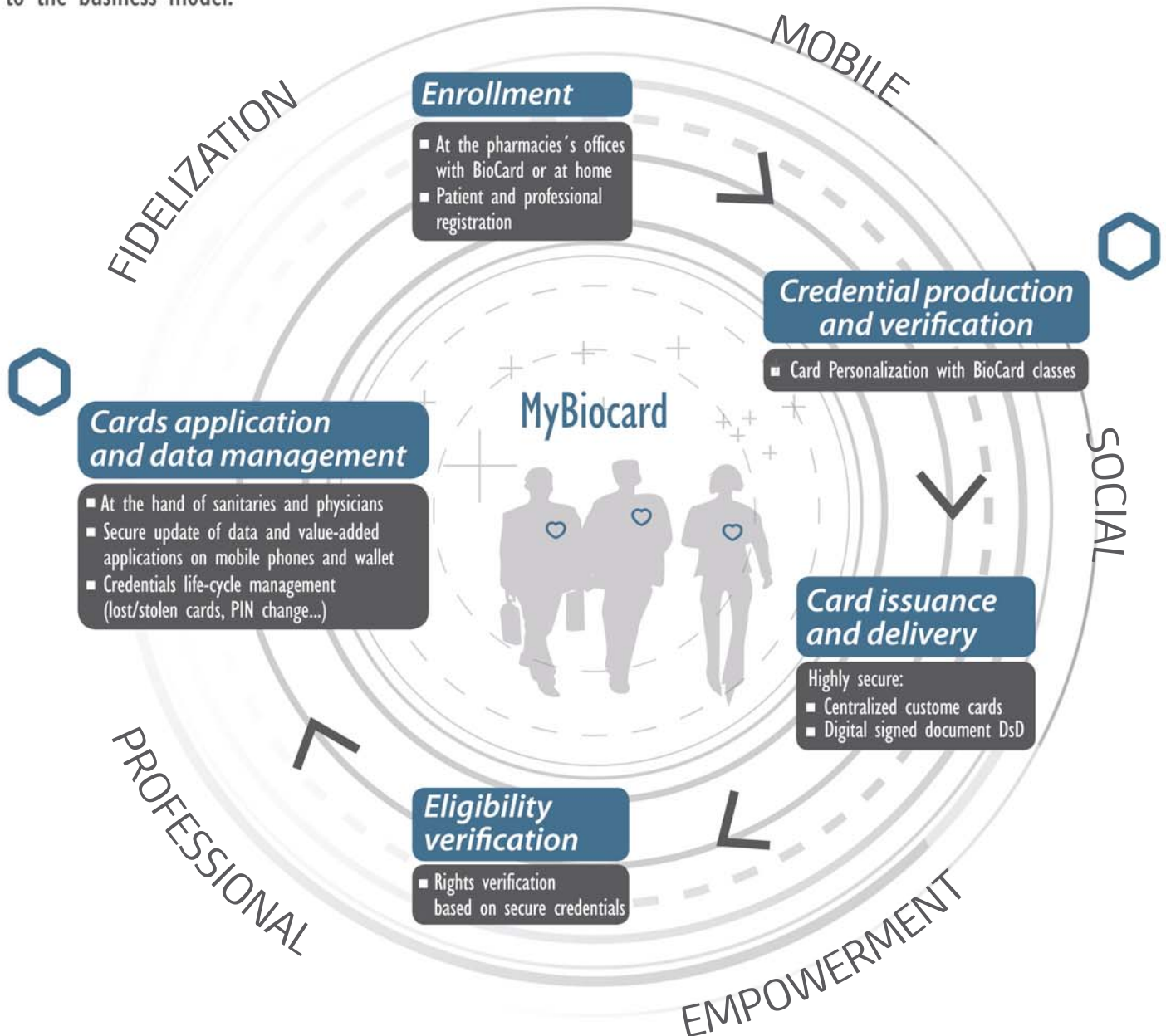
- Allergies
- Conditions
- Encounters
- Immunizations
- Medication
- Family History
- Emergency Contacts
- Insurance

- Bilirubin
- Cholesterol
- Creatinine
- Glucose
- Hemoglobin
- Triglycerides
- Uric Acid
- CK/CGT/GPT



The BioCard™, biometric pharma card credential management solution is built around AphoTech™ - a software platform that allows pharmacies to efficiently manage the identity of patients and clients, as well as professionals.

AphoTech™ is built around five specialized products and one shared IT platform, the AphoTech™ Core, to cover the wide ranging of pharmaceutical care plans. Each product is independent and fully scalable - as is the system in general. Each of this components can be tailored to the benefactor's (BES) specific needs, giving multiple stakeholder income to the business model.



## BIOMETRICS, AN EFFICIENT AND SECURE WAY AGAINST HEALTH FRAUD

Biocard™ biometrics is one of the key elements to assure the right pharmacy community services in a secure healthcare card issuance process

- We can verify the applicant's identity i.e. check that the person is who she/he claims: this avoids identity theft.
- We can identify the person i.e. check that the person exists only once in the database: this prevents fraudsters from having multiple health cards.

AphoTech™ biometric algorithms rank among the best ones in the world (NIST PFT test in 2010). Using BioCard digital fingerprint allows reducing fraud and increasing trust in the process for all the health stakeholders in the service value chain.

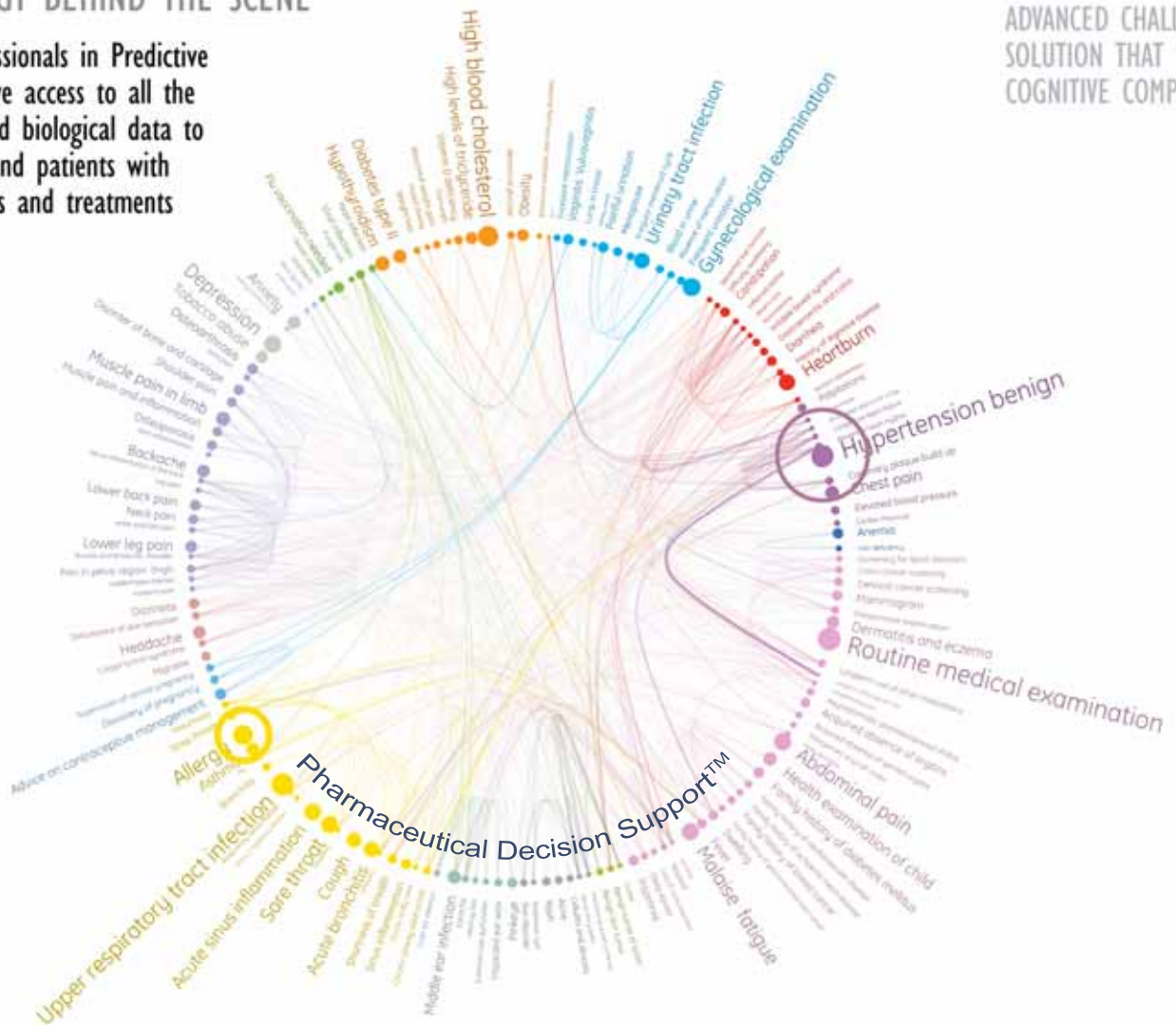
# HOW BIOCARD WORKS

## TECHNOLOGY BEHIND THE SCENE


to help professionals in Predictive Health, to have access to all the knowledge and biological data to help people and patients with new medicines and treatments



APHOTECH IS THE MOST ADVANCED CHALLENGE SOLUTION THAT USES COGNITIVE COMPUTING



Right Drug   
Allergy

Watson Diagnostic   
CODP

Risk Factor   
Hypertension benign

### BioMarkers



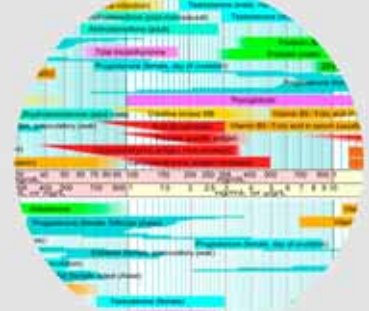
more than 200 with Gen Medication

### Pathologies



more than 3000 Symptoms

### Clinical Guides



thousands of Risk Factors

## TECH PARTNERS





*healthy people and beyond™*

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