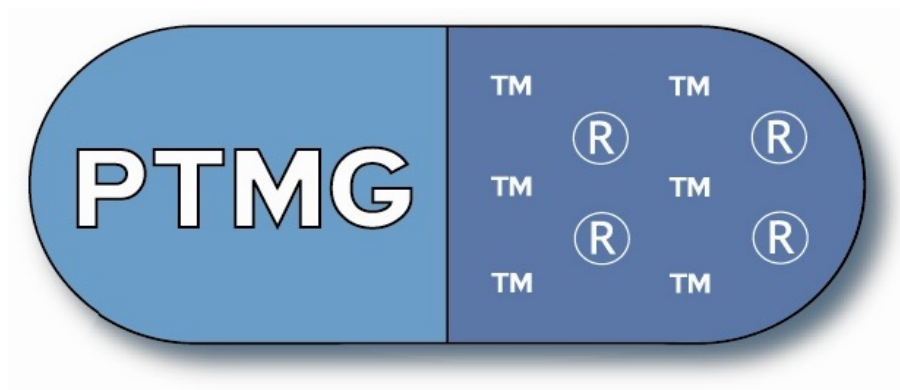




Radka Červenková

CKT Trademarks



The Czech Pharmaceutical Sector Through the Lens of Trademarks

Radka Červenková, LL.M.

Attorney at Law



Today's Journey

01 – From Pharmacy to Pharmaceutical Industry

The evolution of Czech pharma from its 19th-century roots to the post-1989 transformation

02 – Product & Brand Stories: CELASKON and KOFOLA

Innovation, trade marks and enduring brand value

03 – The Czech Pharmaceutical Industry Today

Industry landscape, manufacturing and key figures

Beginnings of the Modern Czech Pharmaceutical Industry | 1850–1918

- Modern pharmaceutical manufacturing developed from **pharmacy-based production**, initially on a small and largely manual scale.
- From the second half of the 19th century, pharmacies increasingly established **laboratories and small-scale manufacturing facilities**.
- Early pioneers included **Gustav Hell** (White Angel Pharmacy in Opava), **Benjamin Fragner** and **František Schnöbling**.
- **Benjamin Fragner** expanded his Prague pharmacy „At the Black Eagle“ (with origins dating back to 1488) into pharmaceutical manufacturing from **1857**; his son Karel subsequently developed the business further.
- Growing production of **medicinal preparations, disinfectants, galenicals and pharmaceutical chemicals** gradually moved beyond traditional pharmacy compounding.
- **World War I accelerated domestic production**, as shortages and disruption of imports increased demand for locally manufactured medicines.
- By 1918, the foundations had been laid for the emergence of a **modern domestic pharmaceutical industry**.

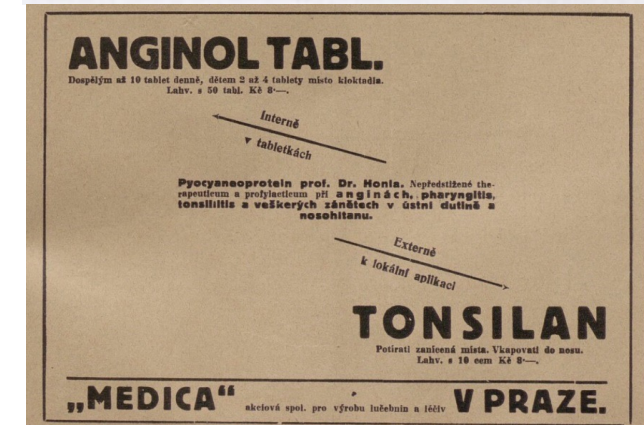


Beginnings of the Modern Czech Pharmaceutical Industry | 1850–1918



Independent Czechoslovakia | 1918–1938

- The new Czechoslovak state created favorable conditions for the rapid development and industrialization of domestic pharmaceutical production.
- The sector expanded from relatively small manufacturers into larger, increasingly modern pharmaceutical enterprises.
- Important companies included **B. Fragner, Remed, Interpharma, Medica, Norgine, Hell, Schnöbling** and **Pragochemia**.
- B. Fragner became one of the country's leading pharmaceutical manufacturers, combining production with extensive research and development.
- Companies increasingly developed their own medicinal products, while scientific research became an important part of pharmaceutical manufacturing.
- The period produced numerous distinctive pharmaceutical product names, including **Alnagon, Stopangin, Dolmina** and **CELASKON**.
- Czech pharmaceutical companies increasingly competed not only through products, but also through recognizable names, packaging and promotion.



Pharmaceutical Industry during WWII | 1938–1945

- The occupation fundamentally altered the environment in which the Czechoslovak pharmaceutical industry operated.
- Pharmaceutical companies faced **wartime shortages, restrictions and changes in access to raw materials**.
- Research nevertheless continued in several important enterprises and laboratories.
- **B. Fragner** employed a substantial scientific team; research included work on **penicillin, insulin and other pharmaceutical substances**.
- Czech researchers followed international scientific developments despite increasingly difficult wartime conditions.
- The period immediately before and during the war also saw important work on **sulphonamides and other new therapeutic substances**.
- By 1945, Czechoslovakia still possessed significant **pharmaceutical manufacturing capacity, scientific expertise and established pharmaceutical products** – but the ownership structure of the entire sector was about to change radically.



From Private Industry to State-Controlled Pharma



- After WWII, Czechoslovakia had a fragmented pharmaceutical industry with **around 300 domestic manufacturers and 4,000 employees**.
- The pharmaceutical industry initially resisted plans for nationalization.
- Following the **Communist takeover in February 1948**, pharmaceutical production was nationalized and concentrated into **Spojené farmaceutické závody (SFZ), later SPOFA**.
- By the end of 1948, **42 pharmaceutical manufacturing facilities** in the Czech lands had been incorporated into the new structure.
- Former private manufacturers included **B. Fragner, Interpharma, Medica, Remed, Wander and F. Schnöbling**.
- Production, research and distribution were progressively brought under **central state control**.

A diverse private pharmaceutical industry was transformed into a centrally organized state sector.

1945 – 1959: Companies Disappeared. Product Names Survived.

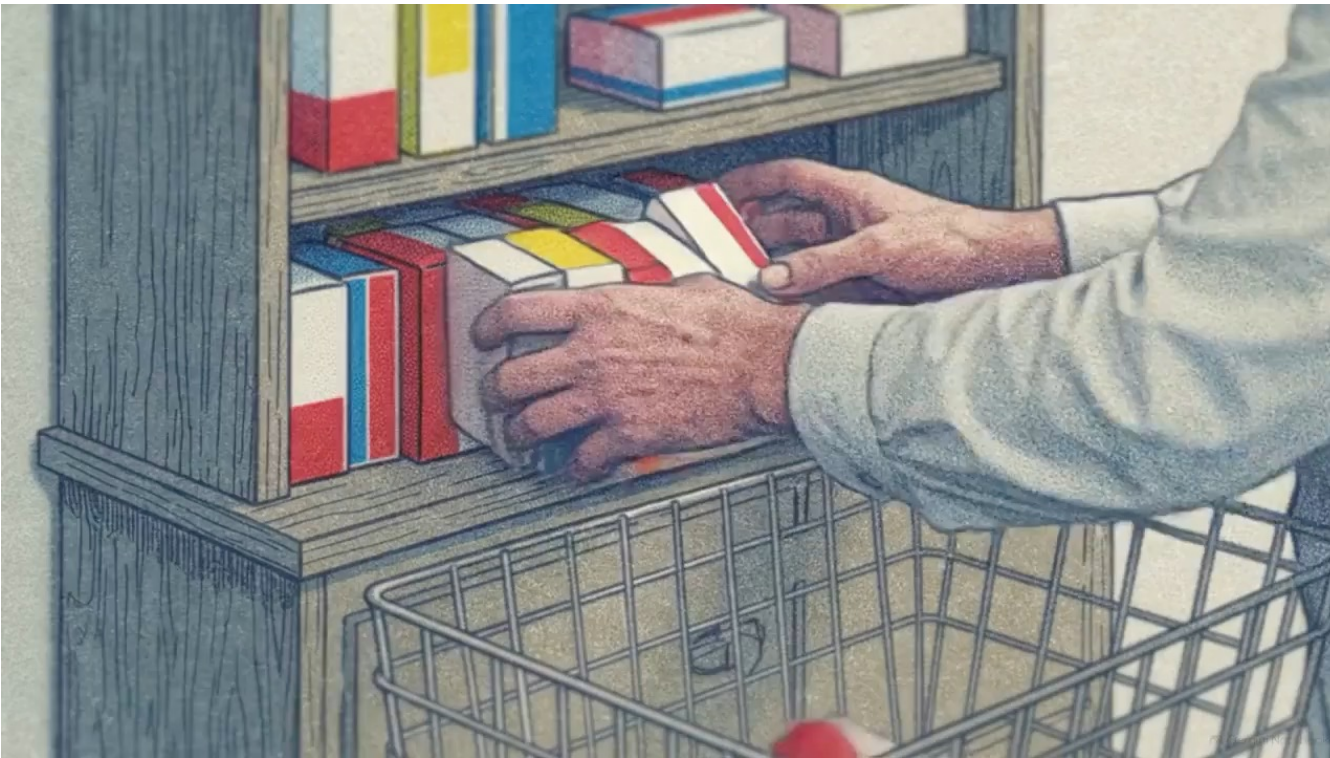


- Nationalization brought together large and often overlapping portfolios: around **1,947 medicinal products were manufactured in 1947** across the nationalized companies.
- SPOFA began eliminating duplicate products; the portfolio was initially reduced by about **half**, and ultimately to approximately **one fifth**.
- Selection took account of therapeutic value, composition and availability of raw materials.
- Yet medicines retained for production generally **kept their established product names**.
- Examples included **Alnagon (B. Fragner)**, **Mironal (Wander)**, **Desurol and Stopangin (F. Schnöbling)**, and **Pontin (B. Fragner)**.
- During the 1950s, pharmaceutical research was increasingly concentrated in **specialized research institutes** and production in larger specialized enterprises.



1960–1989: Industrial Expansion and Modernization

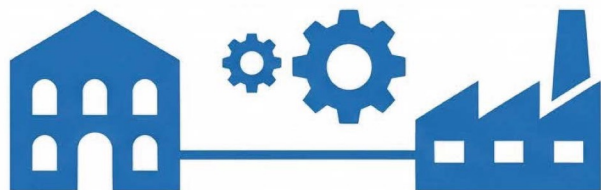
- By the early 1960s, the state pharmaceutical sector had an established structure and entered a period of **substantial industrial expansion**.
- During the 1960s, the value of pharmaceutical production increased by approximately **150%**.
- By **1970**, **SPOFA** employed around **8,000 people** and produced approximately **1,000 medicinal products**.
- Production became increasingly specialized across enterprises including **Léčiva, Galena, Farmakon, Chemopharma, Penicilin** and **Léčivé rostliny**.
- New facilities and technologies gradually replaced labor-intensive production with **modern industrial and automated processes**.
- Czechoslovak medicines were also **exported abroad**, increasingly within the socialist economic bloc after 1968 via Chemapol.
- Growing attention was paid to manufacturing and packaging quality: **SPOFA introduced GMP principles in 1968; mandatory GMP rules followed in 1979**.



IP PARADOX: Brands without Free Market

The Dawn of Modern Czech Pharmaceuticals: The Legacy of B. Fragner & Interpharma (1918–1938)

TWO PATHS TO MODERNITY (1918–1932)



B. Fragner: From Pharmacy to Factory

Modernized the "U Černého orla" pharmacy into a high-standard industrial producer by 1930.



Interpharma: The Research Scientists

Founded in 1932 by scientists Rosický, Steinhauer, and Tamchyna to produce synthetic medicines.



INNOVATION LOOP

A cycle of scientific research → pharmaceutical innovation → successful products → enduring brand identities.

COMPARISON:

	B. Fragner	Interpharma
Origin	Traditional Pharmacy (Malá Strana)	Scientific Research (Prague)
Key Strength	Standardized, high-quality production	Synthetic chemistry and R&D
Major Milestone	1930 Modern Factory in Měcholupy	1932 Founding by research scientists

STRATEGIC COOPERATION & ICONIC INNOVATIONS (1933–1945)



THE VITAMIN REVOLUTION

A 1933 partnership launched Infadin, the first Vitamin D medicine on the Czechoslovak market.



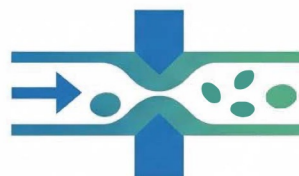
THE VITAMIN REVOLUTION

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CELASKON: A Global Case Study

Their landmark Vitamin C preparation became a cornerstone of domestic pharmaceutical success and brand longevity.



PELENTAN: Wartime Originality

Developed by Interpharma in 1944, this original anticoagulant remained in production until 2005.

TRANSFORMATION & LEGACY (POST-1945)



NATIONALIZATION & SPOFA

Both firms were merged into the state enterprise SPOFA in 1945 after WWII.



SURVIVAL OF BRAND IDENTITY

The Fragner and Interpharma legacies evolved into modern entities like Léčiva and Zentiva.



ENDURING PRODUCT NAMES

Original trademarks like Infadolan and Celaskon continue to maintain high market relevance today.

CELASKON: From Innovation to Brand

B. Fragner × Interpharma

Developed within the companies' joint **vitamin program**

Launched in the 1930s as **vitamin C (ascorbic acid) tablets and injections**

Part of a new generation of scientifically developed vitamin medicines

CELASKON trademark registered on 13 December 1935

Original proprietor: **B. Fragner**

The original trademark remains **valid and used until today**

NASE SKUPINA VITAMINU	
Vitamin A ochranný vitamin epitelu	VIADENIN 1 ccm obsahuje 120.000 m. j. vitaminu A v oleji. Lahvičky à 5 a à 30 ccm.
Vitamin B ₁ antiscorbutický vitamin	BETUNA 1 ccm obsahuje 2 mg vitaminu B ₁ = 1.000 m. j. Balení à 3 a à 50 amp. à 1 ccm. BETUNA FORTE 1 ccm obsahuje 10 mg vitaminu B ₁ = 5.000 m. j. Balení à 3 a à 50 amp. à 1 ccm.
Vitamin C antiscorbutický vitamin	CELASKON 1 tabl. obsahuje 0.025 g l-ascorb. kysel. 1 amp. obsahuje 0.05 g l-ascorbové kyseliny. Balení à 20, 200 a à 1.000 tabl. Balení à 10 a à 50 amp.
Vitamin D antirachitický vitamin	INFADIN 1 ccm obsahuje 15.000 m. j. v oleji. Lahve à 10 a à 100 ccm.
A + D	INFADIN A 1 ccm obsahuje 30.000 m. j. vitaminu A a 6.000 m. j. vitaminu D v oleji. Lahvičky à 5 a à 30 ccm. INFADIN RYBÍ TUK 1 ccm obsahuje 600 m. j. vitaminu D; obsah vitaminu A je biolog. kontrolován. Lahvičky à 125 ccm. INFADOLAN 100 gr obsahuje 160.000 m. j. vitaminu A a 3.000 m. j. vitaminu D. MAST K BIOLOGICKÉ REGENERACI TKÁNĚ Tuby à 20 gr, kelímky à 200 gr.
Společní výrobci:	
INTERPHARMA PRAHA	B. FRAGNER PRAHA

CELASKON: 90 Years of Brand Continuity

Different Eras. Different Manufacturers. The Same Brand.

- **1935 till today**
- CELASKON survived the **nationalization of the pharmaceutical industry**; SPOFA took over the vitamin program and continued production
- The trademark passed through successive structures including **B.Fragner** → **SPOFA** → **Léčiva** → **Zentiva** → **Sanofi** → **Zentiva**, reflecting the transformation of the Czech pharmaceutical industry itself
- The brand remained associated with **vitamin C across generations of Czech consumers**
- The portfolio and packaging evolved, while the **CELASKON name endured**
- Today, CELASKON continues as a pharmaceutical brand almost **90 years after its launch**





**CELASKON –
Packaging Over
the Years**



The Story of KOFOLA



Czech Pharmaceutical Market

From a protected system to an open and competitive market

Before 1989

A PROTECTED, STATE-CONTROLLED SYSTEM



Dominance of domestic producers

Most medicines supplied by Czechoslovak state pharmaceutical companies.



Limited foreign presence

Import and foreign companies strongly restricted.



Centralised regulation

State controlled registration, production, distribution and pricing.



Focus on essential medicines

Limited availability of modern therapies compared to Western Europe.

1989

POLITICAL
AND ECONOMIC
TRANSFORMATION



*Opening to
international markets
and integration
with Europe*

After 1989

A COMPETITIVE, INTERNATIONALLY INTEGRATED MARKET



Entry of international companies

Foreign pharmaceutical firms entered rapidly, increasing competition and the availability of medicines.



Growing share of foreign products

The share of foreign medicines on the domestic market gradually increased.



Privatisation and restructuring

State-owned companies were privatised and had to modernise production and improve efficiency.



Modern regulatory framework

New legislation, alignment with European rules, introduction of GMP and a stronger role of SÚKL in registration and market supervision.



Better access for patients

Broader range of modern therapies and higher standards of quality, safety and efficacy.



1989 marked the shift from a protected, nationally dominated market to a competitive, internationally integrated pharmaceutical sector.

More choice for patients. Higher standards. A new era for Czech pharma.

SPOFA – From Many to One, and Then a New Beginning

The consolidation and later transformation of the Czech pharmaceutical industry

1946

Selected companies integrated into SPOFA
(14 companies in total)



B. Fragner
(Léčiva B.F.)



Interpharma

MEDICA

Medica



Pragochemia



Roche

SCHERING

Schering



Wander
(Dr. A. Wander)

and others...

1946 – 1989

A unified state pharmaceutical enterprise



SPOFA

Spojené farmaceutické závody

Production, research
and distribution of medicines
across Czechoslovakia

1990

SPOFA divided into successor companies
(selected examples)

LÉČIVA

Léčiva, s.p.
(origin: B. Fragner)

📍 Praha



Galena, s.p.
(origin: Helico)

📍 Opava



Farmakon, s.p.
(origin: Hamma)

📍 Olomouc



Biotika, š.p.

📍 Slovensko



Léčivé rostliny, s.p.

📍 Zbraslav



Chemopharma, s.p.

📍 Praha

and other companies and research institutes...



**SPOFA united the Czech pharmaceutical industry.
Its successor companies built on this heritage in a new era.**

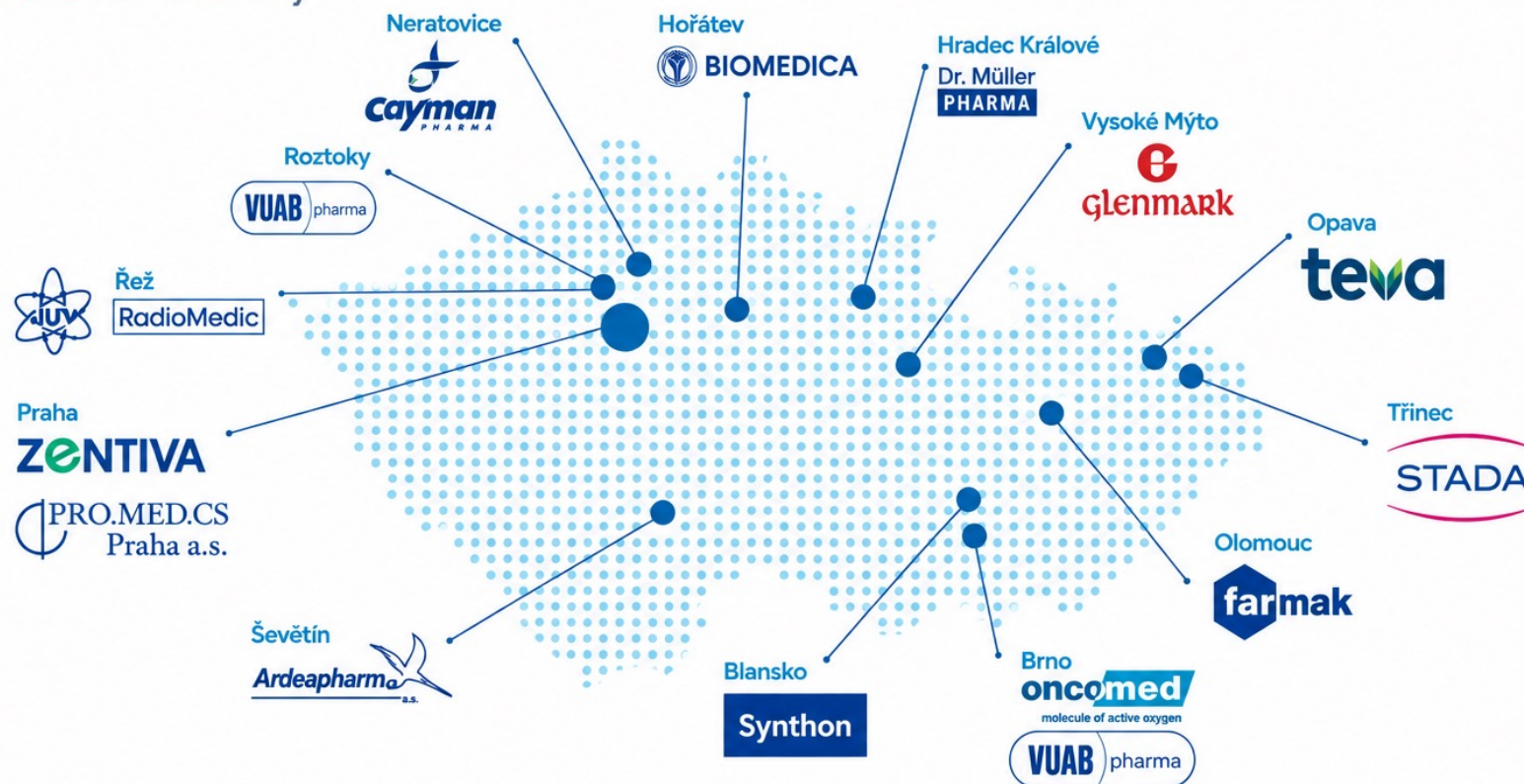
PEOPLE.
KNOWLEDGE.
MEDICINES.
A STRONGER TOMORROW.

Pharmaceutical Manufacturing in the Czech Republic

A strong network of pharmaceutical companies across the country



Czech pharmaceutical companies combine tradition, innovation and regional strength.



Source: ČAFF – Czech Association of Pharmaceutical Companies.
Selected members and their production sites. More information at www.caff.eu.

Czech Pharmaceutical Industry – Key Facts



CZK 111.8 Billion

Total Czech pharmaceutical market value in 2024
(manufacturing prices excluding sales mark-ups and VAT)

Market Composition by Value

Prescription Medicines:
CZK 102 Billion

91.2% of the total financial value.

**Prescription-Free
(OTC) Medicines:**
CZK 9.8 Billion

8.8% of the total
market value.

Medicine consumption in the Czech Republic



258
Million Packs

Total volume supplied annually



73.2%
Prescription Volume

Majority share of medicines supplied
by volume



32.1%

Non-Patented Value Share*
Significant portion including
generics and biosimilar medicines



390
Marketing Authorisation Holders

Number of companies supplying
registered medicines



64,900
Registered Variants**

Total medicinal product variants
registered



9,700
Active Variants

Medicinal variants actively traded
and available

Data Scope & Qualifications:

* Including generics and biosimilar medicines.

** Excluding veterinary medicinal products; manufacturing prices without trade mark-ups and VAT.
Source: ČAFF – Czech Association of Pharmaceutical Companies; IQVIA data exclusive for ČAFF, 3/2025.

Thank you for your attention!

Radka Červenková, LL.M.

r.cervenkova@ckt-trademarks.eu

