

Family Overview

Styles

Geigy Duplex VIP Light Geigy Duplex VIP Light Italic Geigy Duplex VIP Regular Geigy Duplex VIP Italic Geigy Duplex VIP Medium Geigy Duplex VIP Medium Italic Geigy Duplex VIP Bold Geigy Duplex VIP Bold Geigy Duplex VIP Black Geigy Duplex VIP Black

Separate

PDF

Geigy Geigy Mono

Supported Scripts	Latin Extended				
File Formats	Opentype CFF, Truetype, WOFF, WOFF2				
Design	Robert Huber (2023–2024)				
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	Sales & licensing inquiries: sales@lineto.com	www.lineto.com			

About the Font

For the development of the variable version of LL Geigy, designer Robert Huber ventured into the realm of duplexed fonts, also known as 'uniwidth': Typefaces that have proportional characters, but whose spacing and kerning does not change.

With conventional fonts, the metrics and kerning values change across different weights and styles, with the spacing variations resulting in text reflow when switching weights or axes. LL Geigy Duplex is variable font based on the duplex model, where each individual glyph occupies the same amount of space across the entire weight and style range, from Light to Black, and from Roman to Italic.

This concept dates back to the early 20th century, particularly during the hot metal typesetting era, where duplex fonts made printing processes more efficient. Uniwidth typefaces were used to enable typesetters to easily switch between lighter and bolder weights, or between roman and italic styles, without reflow of text – which, at the time, was not automatic as it is in today's layout software; it would have required the re-setting of whole paragraphs of text. The design process of LL Geigy Duplex Variable required an in-depth study of all glyph widths, proportions, metrics, and kerning across Geigy's entire weight range. Drawing, metrics, and kerning were thoroughly analyzed and adapted from the original Geigy fonts, resulting in a typeface that flawlessly performs in both static and animated contexts.

The elimination of layout shifts when changing font weights offers a significant advantage in applications where weights are frequently switched, such as screen-based interfaces where text or buttons may transition from light to bold or from upright to italic when hovered. The gradual variable format, in particular, lends itself well to animated type applications, where sophisticated optical effects can be achieved.

LL Geigy Duplex Variable combines one or two gradual axes (weight and slant) within one file, connecting to type history by addressing the mechanical demands of early 20th-century typesetting while adapting this concept for the 21st century.

Glyph Overview

Uppercase	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z					
Lowercase	a b c d e f g h i j k l m n o p q r s t u v w x y z					
Proportional, Tabular Figures	0123456789 0123456789					
Ligatures	ff fi fl ft tt					
Std Accented Characters - Standard Western	À à Á á Â â Ã ã Ä ä Å å Æ æ Ç ç È è É é Ê ê Ë ë Ì ì Í í Î î Ï ï Đ ð Ł ł Ñ ñ Œ œ Ò ò Ó ó Ô ô Õ õ Ö ö Ø ø Š š Ù ù Ú ú Û û Ü ü Ý ý Ÿ ÿ Ž ž Þ þ					
Pro Accented Characters - Latin Extension	Ā ā Ă ă Ą ą Æ & B b Ć ć Ĉ ĉ Ċ Ċ Č č D d Ď ď D d Đ đ Ē ē Ĕ ĕ Ė ė Ę ę Ĕ ě Ĕ ẽ E ẹ ᄇ f Ĝ ĝ Ğ ğ Ġ ġ Ģ ģ Ĥ ĥ Ḥ ḥ Ħ ħ Ĩ ĩ Ī ī Ĭ ĭ Į į İ ḷ ị ၊ IJ ij Ĵ ĵ Ķ ķ ĸ Ĺ ĺ Ļ ŀ Ľ ľ Ŀ ŀ Ļ ḷ M ṁ Ń ń Ņ ņ Ň ň h Ŋ ŋ Ō ō Ŏ ŏ Ő ő Ọ ọ Ø ǿ ᄇ ṗ Ŕ ŕ Ŗ ŗ Ř ř Ś ś Ŝ ŝ Ş ş Ş ş Ś ṡ Ṣ ş Ţ ţ Ţ ţ Ť ť Ŧ ŧ Ť ṫ Ũ ũ Ū ū Ŭ ŭ Ů ů Ű ű Ŭ ŭ Ų ụ Ų ų Ŵ ẁ Ŵ ŵ Ŵ ŵ Ŵ ŵ					

Punctuation	(.,:;?!¿;…)[&@#]{}«» ‹>""",'′_/\'"†‡*·¶§©®®™				
Case Sensitive Forms	()[] { } « » < > ¿ i @ ·				
Currency, Mathematical Operators	€\$£¥¢Ø₿₩₪₫₱₴₹₽₺\$₿¤f%‰ +-×÷=≠≈<>≤≥±~¬◊∂Δ∏ΣΩμ π∫∞√/^ ¦ℓе°/№				
Tabular Forms	€\$£¢₡₿₩₪₫₱₴₹₺₽₿#%%.,:; °f				
Superscripts, Subscripts, Fractions, Ordinals	$\begin{array}{cccccccccccccccccccccccccccccccccccc$				
Arrows	< → ↑ ↓ < 7 ⊻ ∠ ↔ \$				
Circled Numbers	1 2 3 4 5 6 7 8 9				
Numerators, Denominators	10123456789/0123456789				
Symbols	$\blacksquare \square \bullet \bullet \land \lor \lor \lor \lor \lor \checkmark \checkmark \checkmark \lor \lor \lor \land \land \land \land$				

Layout Features

Case Sensitive Forms	[Secret] May-July «Hello» ¿Adónde?	[SECRET] MAY–JULY «HELLO» ¿ADÓNDE?
Standard Ligatures	flatoffice	flat office
Tabular Lining Numbers	1.7.1982 6.2.1824	1.7.1982 6.2.1824
Arbitrary Fractions	14 1/6 × 2 3/8 160 1/9 4 2/3 ÷ 9 5/6	14 ½ × 2 ¾ 160 ⅓ 4 ⅔ ÷ 9 5⁄6
Contextual Multiplication Glyph	2 × 3 35 × 76 cm	2×3 35×76cm
Superscript	North1, East2	North ¹ , East ²
Subscript	H20	H₂O
Ordinals	1 a 1 o	1 ^a 1 ^o

Stylistic Set 01: Single-Storey a	Catalyst	Catalyst			
Stylistic Set 02: Closed C, c	Chemicals	Chemicals			
Stylistic Set 03: Alternate K, k	Kommunikation	Kommunikation			
Stylistic Set 04: Alternate R	P. MÜLLER	P. MÜLLER			
Stylistic Set 05: Alternate S, s	Sickness	Sickness			
Stylistic Set 06: Alternate 2	2 ² / ₅ Dosage	2⅔ Dosage			
Stylistic Set 07: Alternate Registered	Ciba®	Ciba®			
	Acaralate®	Acaralate [®]			
Stylistic Set 08: Alternate	→ Irgapirina ←	→ Irgapirina ←			
Arrows	⊾ Analgesico	🔉 Analgesico			
Stylistic Set 09: Alternate Currencies	10\$+30¢	10\$+30¢			
	13 661,60₩	13 661,60₩			
Stylistic Set 10: Contextual f, t	Identification	Identification			
Stylistic Set 11: Tabular Fractions	14 ¹ / ₆ × 2 ³ / ₈	14 ½ × 2 ¾			

LL Geigy Duplex VIP Light

Analysis Bio-TECHNIC

45 Points

Hormones Immunization INSULIN

32 Points

Licence Manufacturing Mutagen NUTRACEUTICAL

25 Points

Oncology Pharmaceuticals Receptor Side-Effects, Symptom TACHYCARDIA

55 Points SS04 Alternate R

Diagnosis Enzymes Formulations GENERIC

LL Geigy Duplex VIP – Specimen

LL Geigy Duplex VIP Light

16 Points

All three Swiss companies prospered and continued to diversify in the decades after World War II, though Sandoz earned an unwelcome notoriety in the 1960s when one of its inventions, a potent hallucinogen called LSD, became a favourite illicit drug in the United States and Europe. In 1970 Ciba and GEIGY MERGED TO FORM CIBA-GEIGY AG, AND IN 1996, IN THE MIDST OF A WAVE OF CONSOLIDATIONS AND

13 Points

Meanwhile in Basel, in 1859, Alexander Clavel took up the production of fuchsine in a silk dyeing factory, before selling the factory to Bindschedler & Busch in 1873. Three years later, the company has a commercial presence in Germany, France, England, Italy, Russia and the US. By 1884, Bindschedler & Busch had transformed into a joint-stock company and was renamed Gessellschaft fur Chemische Indus-TRIE BASEL OR "CIBA" FOR SHORT. CIBA'S FIRST PHARMACEUTICAL SUBSTANCES WERE ANTISEPTIC VIOFORM AND ANTIRHEUMATIC AGENT SALEN IN 1900. THE ROOTS OF SANDOZ 10.5 Points

intsThe roots of Sandoz date back to 1886, when chemical
company Kern & Sandoz was established in Basel by
Dr Alfred Kern and Edouard Sandoz. By 1895, the company
had produced its first pharmaceutical substance: antipy-
rine, which was a fever-controlling agent. In 1917, Professor
Arthur Stoll created Sandoz's pharmaceutical department
and research began. A year later, Stoll isolated ergotamine
FROM ERGOT AND THE SUBSTANCE WENT ON TO TREAT
MIGRAINE HEADACHES. IT WAS INTRODUCED ONTO
THE MARKET AS GYNERGEN IN 1921. IN 1918, ALL THREE

8.5 Points In 1938, Geigy decided to incre-

ase its focus on healthcare and established a pharmaceutical department. Antirheumatic drug Butazolidin (phenylbutazone) was the company's first product in 1949. By 1958, Geigy successfully entered the psychotropic MARKET, MARKED BY THE INTRO-DUCTION OF TOFRANIL (IMI-PRAMINE). A YEAR LATER, THE COMPANY INTRODUCED THE first long-lasting diuretic, Hygroton (chlorthalidone) for the treatment of high blood pressure, followed by antiepileptic Tegretol (carbamazepine) in 1963. The abbreviation "Ciba" was formally adopted as the company name in 1945 (although people had been calling it this FOR YEARS). IN 1963, CIBA INTRO-DUCED A BREAKTHROUGH PRO-DUCT FOR THE TREATMENT OF IRON AND ALUMIUM OVERLOAD

6.5 Points

In 1970, Ciba and Geigy merged to form Ciba-Geigy Ltd. Ten years later, a biotechnology unit was established. In 1981, the first transdermal delivery system, Scopoderm TTS (hyoscine hydrobromide) was introduced for travel sickness. Ciba-GEIGY ESTABLISHED CIBA VISION IN 1987 AND IN 1994, ITS FORMED A STRATEGIC PARTNERSHIP WITH BIO-TECHNOLOGY COMPANY

 Chiron. While Ciba and Geigy
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 became one, Sandoz contin r

 ued to advance its pharma N

 ceutical business, introducing
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 anti-allergic drug Zaditen
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 (ketotifen) in 1977, followed
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 by immunosuppressants
 i

 Sandimmun (cyclosporine)
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 1982 and Neoral (cyclo g

 SPORINE) IN 1994. IN DECEM N

 BER 1996, SANDOZ AND
 C

 CIBA-GEIGY MERGED TO
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 FORM NOVARTIS IN ONE OF
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 THE LARGEST CORPORATE
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mergers in history. Sandoz remained as a subsidiary of Novartis and today develops, manufactures and markets generic drugs. Today, Sandoz employs over 23,000 people in 130 countries, with global headquarters based in Holzkirchen, Germany. Dr Daniel VASELLA WAS THE FIRST CEO OF THE NEWLY MERGED COMPANY. VASELLA WAS HIRED BY SANDOZ BACK IN 1988 AND REMAINED THERE

LL Geigy Duplex VIP Light Italic

80 Points

Asthma Bacteria CARE

45 Points

Hemostasis Hygiene INOCULATION

32 Points

Leukemia Lipid, Metabolism Microbial NUTRITIONAL

55 Points

Dosage Epilepsy, Ethic Fungicide GENOMICS

25 Points

Organic Recipe Painkillers Phlebotomy, Resistance Spectrometry TRANSPLANTATION

LL Geigy Duplex VIP Light Italic

16 Points

After World War I, demand for agrochemicals, photographic products, plastics and other chemical specialties began to increase rapidly, and production facilities in Klybeck were working at full capacity. In the period between World War I and World War II, Ciba in particular continued to expand its RANGE OF HIGHQUALITY DYE SPE-CIALTIES. IT HAD RECOGNIZED THAT, IN THE FACE OF INCREASINGLY

13 Points

Despite some difficulties encountered during World War II, such as diminishing coal supplies from Germany, Basel's industry was in excellent shape in 1945. The companies had invested their profits in modernizing production and now had practically the only functioning plants in Europe. With the boom that began after the end of the war, they benefitted accordingly. The goods produ-CED IN BASEL WERE SUPERIOR IN QUALITY AND IN GREAT DEMAND INTERNATIONALLY. ONLY THE CAPACITY AND THE LIMITED AVAILABILITY OF RAW MATERIALS HELD THE 10.5 Points

Paul Nickler remembers this period well. When he started his apprenticeship as a laboratory technician at Ciba in 1947, Klybeck still looked rural compared to today. There were already modern production buildings, yet in between there were allotment gardens and even farms along the Wiese river. And then there were the old, shabby huts along the Rhine, where aniline dyes were produced on open wooden BOILERS UNTIL THE 1950S. A DIRTY BUSINESS, AS NICKLER RECALLS: "THE DYE PRODUCTION WAS DOWN BY THE RHINE, WHERE THEY PRODUCED RED AND

8.5 Points Alexander Clavel had laid the

foundation for these successes in 1864 with the first dye factory in Klybeck. For a long time thereafter, until the first decades of the 20th century, dyes remained the most important and lucrative business segment for compa-NIES SUCH AS CIBA, GEIGY AND SANDOZ. BY THE START OF WORLD WAR I, THE WORLD MARKET FOR TEXTILE DYES WAS almost completely divided between German and Swiss companies, with Germany producing the bulk of the synthetic dyes. When German exports were blocked after the outbreak of the war, demand for Basel dyes rocketed. So it is not surprising THAT THE THREE LARGE CHEMI-CAL COMPANIES IN BASEL WERE ABLE TO SIGNIFICANTLY INCREASE THEIR SALES DURING

6.5 Points

But the irritating dust from aniline dye production was only one problem. Working in these huts without ventilation or protective clothing was also very unhealthy, and the wastewater ended up in the Rhine, which was common and perfectly legal at THE TIME. IT WASN'T UNTIL MUCH LATER, IN THE 1970S, THAT ECOLOGICAL ASPECTS AND A CONSISTENT SAFETY MINDSET BEGAN TO TAKE

hold in the companies, as retired chemist Giovanni Bonavia recalls. "We tried to respect the problems and concerns of the population. And because you had odor emissions here and there, it was decided to hire a socalled sniffer team. People WALKED AROUND THE AREA, RECORDED THEIR OBSER-VATIONS, ALSO TOOK MEAS-UREMENTS AND ALWAYS REPORTED THEIR RESULTS." The expansion of dye production led to the opening of a large, stateof-the-art dye production building in 1956 on Klybeckstrassewhere the streetcar stop is still called Ciba to this day. The so-called Building 90 was one of the first multistory buildings on THE KLYBECK SITE. RIGHT NEXT TO IT, IN THE HEART OF KLYBECK, STOOD WHAT WAS THEN SWITZERLAND'S TALLEST CONSTRUCT.

Raloxifene >99% (albumin) $C_{26}H_{29}NO$ 20 mg tablets

LL Geigy Duplex VIP Regular

Alkaloid Basel CLINICAL

45 Points

Herbicides Innovative LABORATORY

32 Points

Monitoring Nolvadex (20 mg) Oncology PRESCRIPTION

55 Points

Drug Expertising Facility GUIDELINES

25 Points

Receptor, Radio Sansert Tumor, Transplantation Venipuncture XENOBIOTIC

LL Geigy Duplex VIP Regular

16 Points SS04 Alternate R

Thus, the quarter century after the end of World War II, i.e. until the merger of Ciba and Geigy in 1970, can be described as a period of exceptionally high growth rates. The sales of the Basel chemical and pharmaceutical companies rose from the millions to the billions of Swiss francs. Despite SOME DIFFICULTIES ENCOUNTERED DURING WORLD WAR II, SUCH AS DIMINISHING COAL SUPPLIES FROM

13 Points

But the growth of the Basel industry was not limited to new dye ranges. With the invention of Araldite in 1946, Ciba took an important step in synthetic resins, and after the discovery of the insecticide DDT in 1939, sales development also accelerated at Geigy, to name just a few examples from the diverse activities of the companies. Thus, the quarter century after the end of World War II, i.e. until the merger of Ciba AND GEIGY IN 1970, CAN BE DESCRIBED AS A PERIOD OF EXCEPTIONALLY HIGH GROWTH RATES. THE SALES OF THE BASEL CHEMICAL AND PHARMACEUTICAL COMPANIES ROSE 10.5 Points

8.5 Points

And then there were the old, shabby huts along the Rhine, where aniline dyes were produced on open wooden boilers until the 1950s. A dirty business, as Nickler recalls: "The dye production was down by the Rhine, where they produced red and green dyes. They were poor guys. They were always covered in dyes, which didn't come off even after they showered." But the irritating dust from ANILINE DYE PRODUCTION WAS ONLY ONE PROBLEM. WORKING IN THESE HUTS WITHOUT VENTILATION OR PROTECTIVE CLOTHING WAS ALSO VERY UNHEAL-

A Ciba publication from the 1950s described the diverse world of dyes as follows: "Most of it is used for dyeing and printing textiles... but our dyes are also used for leather, paper, hides and furs, wood and glass fibers, aluminum and plastics, inks, VARNISHES AND SOAPS, AND EVEN FOR COLORING FOOD." THE SAME BROCHURE ALSO LISTS A LONG SERIES WITH A TOTAL OF

81 different dye assortments, each of which in turn included dozens of shades. There were, for example, Neolane dyes for wool, Oxanal dyes for oxidized aluminum, or Coprantine dyes for textile printing. All were based on different chemical structures and COMPLEX DYEING PROCESSES. MAX BITTERLI EXPERIEN-CED THIS BOOM AND INNOVA-TION PHASE DURING HIS

6.5 Points

It wasn't until much later,Itin the 1970s, that ecologicalaspects and a consistentthaspects and a consistentthsafety mindset began to takeaspect and a consistentthhold in the companies, asthretired chemist GiovannithBonavia recalls. "We tried tothrespect the problems andthconcerns of the population.thAND BECAUSE YOU HADthODOR EMISSIONS HERE ANDthTHERE, IT WAS DECIDEDthTO HIRE A SO-CALLED SNI-thFFER TEAM. PEOPLE WAL-th

ked around the area, recorded their observations, also took measurements and always reported their results." The expansion of dye production led to the opening of a large, stateof-the-art dye production building in 1956 on Klybeckstrasse - where THE STREETCAR STOP IS STILL CALLED CIBA TO THIS DAY. THE SO-CALLED BUILDING 90 WAS ONE OF THE FIRST MULTISTORY buildings on the Klybeck site. Right next to it, in the heart of Klybeck, stood what was then Switzerland's tallest construct. The snow-white and 120-meter-high chimney had already been completed a year earlier. These two striking structures represented THE IMPORTANCE THAT DYE AND CHEMICAL PRO-DUCTION HAD NOT ONLY FOR CIBA AND THE KLYBECK AREA, BUT ALSO FOR THE

LL Geigy Duplex VIP Italic

80 Points

Atabrine Biotech CAPSULE

55 Points

Dispensary Esidrix Formulation GASTRIC

45 Points

Haldol Isocarboxazid LARGACTIL

32 Points

Marplan, Mutagen **Nutraceutical Ophthalmology** PALUDRINE

25 Points **SS05** Alternate S. s

Receptor, Resistance Side-effects Thrombosis, Tofranil World Health Organization **ZYMOGEN**

LL Geigy Duplex VIP Italic

16 Points - SS06 Thin Bracket, Slash, Bar

The same brochure also lists a long series with a total of 81 different dye assortments, each of which in turn included dozens of shades. There were, for example, Neolane dyes for wool, Oxanal dyes for oxidized aluminum, or Coprantine dyes for textile printing. All were BASED ON DIFFERENT CHEMICAL STRUCTURES AND COMPLEX DYEING PROCESSES. MAX BITTER-

13 Points

"When I joined in 1957, reactive dyes had been developed that were high-quality and washfast, which was not the case before with direct dyes." But the growth of the Basel industry was not limited to new dye ranges. With the invention of Araldite in 1946, Ciba took an important step in synthetic resins, and after the discovery of the insecticide DDT in 1939, sales develop-MENT ALSO ACCELERATED AT GEIGY, TO NAME JUST A FEW EXAMPLES FROM THE DIVERSE ACTIVITIES OF THE COM-PANIES. THUS, THE QUARTER CENTURY 10.5 Points

8.5 Points

IntsThis growth was recorded in all areas of Ciba, Geigy and
Sandoz. And sales also continued to rise through the acquisi-
tion of new businesses. In the late 1950s, for example,
Ciba expanded its business areas with llford photochemicals
and Mettler-Toledo electronic equipment. The internatio-
nal presence was also steadily expanded. While Sandoz had
19 foreign subsidiaries in 1956, it owned 40 just 10 years
LATER IN 1966. BUT THERE WERE ALSO DIFFERENCES
BETWEEN THE BASEL COMPANIES. AT CIBA AND SANDOZ,
FOR EXAMPLE, IT WAS INCREASINGLY THE PHARMA-

These products played a major role in enabling Geigy to surpass Ciba sales in 1968. Between 1956 and 1966, Geigy's sales rose from 511 million to 2 billion Swiss francs, and by 1968 they had already reached 2.7 billion. The merger of Ciba and Geigy in 1970 THEN BROUGHT RENEWED VIGOR TO THE INCREASIN-GLY DIFFICULT DYES AND CHEMI-CALS BUSINESS, AS MAX BIT- terli recalls: "The merger was really positive, because it enabled the two companies to make good progress in wool and synthetic fiber dyes." However, just a few years after the merger, the golden age of the Basel "chemical" industry was definitely COMING TO AN END. AS A RESULT OF INCREASINGLY FIERCE GLOBAL COMPETITION AND DECLINING MARGINS

6.5 Points

Ciba-Geigy is the largest chemical company in Switzerland. But since the country offers only a limited market and lacks many essential raw materials, Swiss chemical companies have been forced to enter foreign mar-KETS; AND IN ORDER TO COMPETE SUCCESS-FULLY, THEY HAVE HAD TO LEAD THE WORLD IN CERTAIN TECHNOLOGIES.

In the early years of the twentieth century, the world's strongest chemical industries were in Germany, the United States, and Swit-zerland. German companies, fearful of losing their leading position to rapidly advancing American firms, openly collu-DED AND COORDINATED BUSINESS STRATEGIES. AFTER WORLD WAR I THE GERMAN COMPANIES FORMED A CARTEL, THE notorious IG Farben. In order to remain competitive with the Germans, the three largest Swiss chemical companies, Ciba Ltd., J.R. Geigy S.A., and Sandoz Ltd., formed a similar cartel called Basle AG. This trust lasted from 1918 to 1951. By 1970, however, market CONDITIONS LED CIBA AND GEIGY TO MERGE, FORMING ONE OF THE WORLD'S LEADING PHARMACEUTICAL AND SPECIALTY CHEMICAL

$C_{10}H_{16}N_6S$ 252.34 g·mol Urticaria **IE-selectin**

LL Geigy Duplex VIP Medium

80 Points

Stromid ButaZOLIDIN

Hormones Illness LICENCED

32 Points SS01 Single-Storey a

45 Points

Monoclonal Neurotransmitter Pathology RADIOLOGY

55 Points

Cardiovascular Depressant Experimental FACILITY

25 Points

Recurrence Regulation, Sandoz Synthesis Ultrasonography WELLNESS

LL Geigy Duplex VIP Medium

16 Points

Novartis is a full member of the European Federation of Pharmaceutical Industries and Associations, the Biotechnology Innovation Organization, the International Federation of Pharmaceutical Manufacturers and Associations, and the Pharmaceutical Research and Manufacturers of America. Novar-TIS IS THE THIRD MOST VALUABLE PHARMACEUTICAL COMPANY IN EUROPE, AFTER NOVO NORDISK AND

13 Points SS02 Closed C, c Sandoz is the generic drugs division of Novartis. Before the 1996 merger with Ciba-Geigy to form Novartis, Sandoz Pharmaceuticals (Sandoz AG) was a pharmaceutical company headquartered in Basel, Switzerland (as was Ciba-Geigy), and was best known for developing drugs such as Sandimmune for organ transplantation, the antipsychotic Clozaril, Mellaril Tablets and Serentil Tablets for treating psychiat-RIC DISORDERS, AND CAFERGOT TABLETS AND TORECAN SUPPOSITORIES FOR TREAT-ING MIGRAINE HEADACHES. THE CHEMIE-FIRMA KERN UND SANDOZ WAS FOUNDED IN 10.5 Points - SS02 Alternate C, c

After the merger, other Ciba-Geigy and Sandoz businesses were sold, or, like Ciba Specialty Chemicals, spun off as independent companies. The Sandoz brand disappeared for three years, but was revived in 2003 when Novartis consolidated its generic drugs businesses into a single subsidiary and named it Sandoz. Novartis divested its agrochemical and genetically modified crops business in 2000 with THE SPINOUT OF SYNGENTA IN PARTNERSHIP WITH ASTRAZENECA, WHICH ALSO DIVESTED ITS AGROCHEMI-CAL BUSINESS. THE NEW COMPANY ALSO ACQUIRED

8.5 Points The

The First World War broke out in August 1914, and one month later the Germangovernment banned exports to Britain and its allies. The British naval blockade began torestrict German trade with nonbelligerent nations, particularly the United States. Moreover, some BRITISH-MADE INTERMEDIATES WERE NO LONGER AVAILABLE IN GERMANY. THE GERMAN INDUSTRIES QUICKLY INTEGRA- ted their activities to assist the Kaiser's war effort, especially self-sufficiency programs, and in 1916 the two communities of interests merged. Two years later the three largest Swiss firms, CIBA, Geigy and Sandoz, formed their ownInteressengemeinschaft, THE BASELER IG. COUNTRY; THIS INCLUDED VERY LITTLE SYNTHETIC INDIGO.DURING 1907, KALLE OF BIEBRICH BECAME

6.5 Points

Novartis was created in 1996 through a merger of Ciba-Geigy and Sandoz. Novartis and its predecessor companies trace roots back more than 250 years, with a rich history of developing innovative products. From beginnings in the PRODUCTION OF SYNTHE-TIC FABRIC DYES, THE COMPANIES THAT EVENTU-ALLY BECAME NOVAR-TIS BRANCHED OUT INTO

producing chemicals and ultimately pharmaceuticals. The history of Novartis traces the converging destinies of three companies: Geigy, a chemicals and dyes trading company founded in Basel, Switzerland in the middle of the 18th century; CIBA, WHICH BEGAN PRO-DUCING DYES IN 1859; AND SANDOZ, A CHEMICAL COMPANY FOUNDED IN BASEL IN 1886. THESE COM- panies shared a common trait which lives on at Novartis: a passion for creating and marketing new products that contribute to human progress through advances in science, health and chemistry. Building on this heritage, today Novar-TIS FOCUSES ITS INNO-VATION PROWESS ON ADDRESSING THE UNMET NEEDS OF PATIENTS WORLDWIDE. NOVARTIS

LL Geigy Duplex VIP Medium Italic

80 Points

Acid Reflux BASUDIN

55 Points

Cytology Dispensing Excretion **HYDROLYSIS**

45 Points

Imipramine **Insidon**® LIPOPHILIC

32 Points

Mutagen **Nutraceutical Peptide** PERTOFRANE

25 Points

- → Subcutaneous
- **Thorazine**
- → Venipuncture
- ⊾ Virology
- → XEROSTOMIA

LL Geigy Duplex VIP Medium Italic

16 Points SS05 Alternate S, s

In 1888, the chemist T. Sandmeyer joined Geigy. He had previously investigated Green's primuline, a colorant that was not protected by a patent. Sandmeyer established the constitution and the method of preparation, which was imsmediately scaled-up in the Geigy factory. ALMOST SINGLE-HANDED, SAND-MEYER WAS RESPONSIBLE FOR A STRING OF SUCCESSES,

13 Points

The La Fuchsine monopoly had forced several French chemists and firms to move to Switzerland where that country's fledgling dye industry began to flourish from around 1862. The first Swiss firms to manufacture coal tar dyes were dyers, dye merchants and tardistillers in Basel who entered the field in 1860 This included Alexander Clavel, a Frenchemigre who set up what in 1884 was to become the Gesellschaft FUR CHEMISCHE INDUSTRIEBASEL (CIBA). J.J. MULLER-PACK ORIGINALLY SOLD DYE-WARES ON BEHALF OF THE GEIGY FAMILY, AND BEGAN THE MANUFACTURE OF MAUVE AND 10.5 Points

The aniline dyes manufactured in Basel were exported from the very beginning, initially to France, and then later to the UK and Germany too. In addition to European customers, North American and Asian customers bought dyes from Basel from the 1870s. To begin with, distribution was undertaken by independent trading companies, but was increasingly taken over by subsidiaries as time went on. BASEL'S CHEMICAL COMPANIES OPERATED FOREIGN PRODUCTION SITES AND REGIONAL OFFICES FROM A SURPRISINGLY EARLY STAGE. WHAT PROMPTED THEM

8.5 Points

Geigy had decided as far back as 1891 to set up a French production site. One year later, the company rented a vacant factory building in Maromme, close to the textile center of Rouen. In 1894, it purchased the building. It was a very modest production plant: up until THE OUTBREAK OF THE FIRST WORLD WAR, IT EMPLOYED ONLY FIVE TO SEVEN PEOPLE MANU-FACTURING EXTRACTS. IT WAS again Durand & Huguenin who established a factory in the Alsatian town of Hüningen, on the border with Switzerland, in 1886. Following the Franco-Prussian War of 1870–1871, large parts of Alsace were annexed by Germany. The journey between the Hüningen PRODUCTION SITE AND THE COMPANY HEADQUARTERS WAS EXTREMELY SHORT. TEN YEARS LATER, THE 4,300 SQUARE METER

6.5 Points

Geigy purchased a plot in nearby Grenzach in 1897 and built the first production, office and machinery buildings there over the following two years. Production began at the end of 1898. There were numerous reasons for this investment: first, the FACILITIES AT ROSENTAL WERE OUTDATED. THE SITE WAS BECOMING INCREASINGLY BOXED IN BY RESIDENTIAL STREETS,

and residents were being disturbed by noise and odors. Thirdly, the Grenzach site was connected to the German railroad network. The foreign location of this production facility had little significance until the outbreak of the First World War. BEFORE THAT, THE BOR-DERS IN THE BASEL REGION WERE PERMEABLE, MEANING LABOR AND CAPITAL COULD CIRCU- late freely. Grenzach considered itself a suburb of Basel, like the Swiss towns of Muttenz and Birsfelden. In 1890, Geigy rented a site with production buildings in Karavayevka, close to Moscow, and began to manufacture dyewood extracts THERE. THE COMPANY ALSO SOLD ANILINE DYES FROM BASEL THROUGH THIS SUBSIDIARY. GEIGY LATER ENTERED INTO A 106 Points

[Xylazine] **Clinical data** $G_{19}H_{24}N_2$ **Prescription Pill**

LL Geigy Duplex VIP Bold

80 Points

Aspirin Basel CROP

At.® Hypersensitivity Irgalane® Isocarboxazid

32 Points

Lymphocyte Medomina, Mutagen Nutraceutical OTOLARYNGOLOGY

25 Points

Pharmacogenetics Preludin Receptor, Symptomatic Siostéran TACHYPHYLAXIS

55 Points

Dispensary Ethical Glucocorticoid HOSPITAL

LL Geigy Duplex VIP Bold

16 Points

The USA became Geigy's second most important market after Germany early on. From 1900, American customers were buying goods worth well over 1 million Swiss francs a year, imported via New York. Geigy products were sold through a retail company. In 1903, the newly founded Geigy Ani-LINE & EXTRACT COMPANY, A SUB-SIDIARY OF GEIGY BASEL, TOOK OVER DISTRIBUTION. THE YOUNG

13 Points

The dyes manufactured in Basel were distributed by branches in Boston, Philadelphia, Providence and Atlanta in the USA, and Toronto in Canada. In 1904, Geigy set up a mixing plant at an existing factory site in New Jersey, reducing freight costs considerably. The company set up production facilities for extracts, which could be produced far more profitably in New Jersey than in Basel thanks to the low cost of raw materials. The BASEL-BASED CHEMICAL COMPANIES HAD TO IMPORT COAL TAR AND THE PRIMARY PROD-UCTS AND INTERMEDIATES DERIVED FROM IT, AND DID SO ALMOST EXCLUSIVELY FROM 10.5 Points - SS01 Single-Storey a

The Basel companies specialized their dyestuff production during the interwar period. They focused on a wide range of high-value products, particularly patented specialties. This enabled them to offset losses from older classes of dyestuffs, where foreign competitors dominated. The Basel chemical industry also moved into new areas: it no longer only produced dyestuffs and MEDICATIONS, BUT ALSO TEXTILE AUXILIARY SUB-STANCES, TEXTILE FINISHING PRODUCTS, PLASTICS, COSMETICS AND PESTICIDES. THE BASEL CHEMICAL

8.5 Points

A predecessor company of Novartis first dealt with malaria in the 1810s. Among the colonial products sold by Hieronymus Geigy was cinchona, which had been known to be effective against malaria since the 17th century. Originally from South America, THIS REMEDY WAS USED TO TREAT "STOMACH ILLNESSES AND FEVER". IN 1824, QUININE WAS ISOLATED FROM CIN- chona. The Geigy company was among the first buyers of this new pure substance, whose advantage was that it enabled standardized treatment and more precise dosage for malaria patients. A number of measures have been taken with the aim of reducing CASES AND INDEED EPIDE-MICS OF MALARIA. ONE SUCH MEASURE WAS THE DRAI-NING OF MARSHLAND, WHICH

6.5 Points

The quarter century following the end of the war was a phase of enormous growth for the pharmaceutical industry in all western industrial nations. The Pharmaceuticals Divisions of CIBA and Sandoz became their strongest business segments. BETWEEN 1945 AND 1960, CIBA INCREASED ITS SALES IN THIS AREA FROM AROUND 100 MILLION SWISS FRANCS TO OVER

500 million. These high growth rates can be attributed to various factors: on the demand side, rising prosperity and the expansion of the health insurance sector were crucial. In the USA, the most important sales market for medicines, THE NUMBER OF PEOPLE INSURED INCREASED TEN-FOLD BETWEEN 1940 AND 1960, FROM JUST OVER 12 MILLION TO MORE than 120 million. On the supply side, increasing public and private research investment boosted the rate of innovation throughout the sector. From the late 1940s onwards, the number of medicines launched each year rose considerably. THE INDUSTRY INTRODU-CED A BROAD SPECTRUM OF ALLERGY MEDICATIONS, SEDATIVES, CARDIOVAS-CULAR MEDICINES, PSY-

LL Geigy Duplex VIP Bold Italic

80 Points

Anxiety Breast CANCER

55 Points

Common Doses Evaluation FEVER

45 Points

Gastrointestinal Hypertension IMMUNIZATION

32 Points

Inflammatory Malaria Prevention Nephrology PATHOGENESIS

25 Points

Rheumatology Recurrence, Solubility Subcutaneous Triglycerides, Ulcers WITHDRAWAL

LL Geigy Duplex VIP Bold Italic

16 Points

On April 10, 1970, CIBA and Geigy signed a charter describing the tasks of the institute, which was named after the Basel-based physician and physiologist Friedrich Miescher, the man who discovered nucleic acid. These tasks included training young scientists and conducting basic biomedical RESEARCH. RIGHT FROM THE START, THE FMI PLACED GREAT EMPHA-SIS ON ACTING OUT ITS ROLE AS A

13 Points

Both CIBA and Sandoz were expanding thanks to their pharmaceutical business. The spectacular rates of growth recorded by Geigy, however, were all due to its highly successful agrochemicals, which achieved terrific sales, especially in the USA. Between 1956 and 1966, group sales had risen from 511 million Swiss francs to almost 2 billion Swiss francs. In 1967, the company caught up with CIBA in TERMS OF SALES, AND FIGURES SURGED TO 2.7 BILLION SWISS FRANCS IN 1968. AT THE BOARD OF DIRECTORS MEETING OF MARCH 28,1969, GEIGY CHAIRMAN LOUIS 10.5 Points

The Basel chemical industry had been internationally active in sales and production for some time, and now it also began to cross national borders in its research and development work. From the 1950s onwards, CIBA massively expanded its US research and development activities in Summit (New Jersey, USA). In India, it opened a basic research center for dyestuffs and PHARMACEUTICALS IN GOREGAON NEAR MUMBAI IN 1963. IN LATE 1959, GEIGY PURCHASED A LABO-RATORY BUILDING FOR ORGANIC CHEMISTRY,

8.5 Points

The dynamic growth of Geigy led to the foundation of a group-wide "publicity department" in 1941, which was renamed as the advertising department in 1966. The turning point was the launch campaign for the industrial mothproofing agent Mitin in 1939. For THE FIRST TIME IN ITS HISTORY, THE COMPANY – WHICH HAD SPECIALIZED IN DYESTUFFS UNTIL THE 1920S – WAS FACED with the challenge of appealing not just to industrial customers but also to private households. An agency was commissioned, but the advertising slogan it came up with failed to hit the mark with the public. This unsuccessful campaign prompted the conclusion THAT THE COMPANY NEEDED ITS OWN ADVERTISING SPECIAL-ISTS, AND THE EMERGENCE OF INTENSIVELY MARKETED GEIGY

6.5 Points SS03

Alternate K, k

internal advertising experts (in contrast to external agencies) would sooner or later fall into a routine and become blinkered, Rudin always kept things fresh in his department: his team employed young, talen-TED GRAPHIC ARTISTS, DESIGNERS, EDITORS AND FILMMAKERS, AND ALSO USED THE SERVI-CES OF FREELANCE PHO-

To avoid the danger that

tographers and artists for certain tasks. The studio at the firm's headquarters maintained close ties with the Basel General Vocational School in particular, promoting a lively exchange between design training and practice. This was an IMPORTANT FACTOR IN TURNING BASEL INTO A POOL OF TALENT WHICH HELPED SPREAD SWISS GRAPHIC DESIGN AROUND the world and give it international recognition. The development and quality of graphics and advertising at Geigy resulted mainly from astute HR policies, and not from prescribed design guidelines. In the three decades from 1941 to 1970, OVER 50 DESIGNERS WERE EMPLOYED INTERNALLY OR AS FREELANCERS AT THE BASEL HEADQUAR-TERS. A FURTHER TWO LL Geigy Duplex VIP Bold, Bold Italic

106 Points

C64,03% Chlorpromazine $G_{17}H_{19}GIN_2S$ EU: Rx-only*

LL Geigy Duplex VIP Black

80 Points

Asses Cimeti-DINE

55 Points

Dyestuffs Enteric Glucocorticoid HEALTH

45 Points

Hormonal Injection ISOENZYMES

32 Points

Life-Saving Pill Metabolite Neurotransmitter Peptide

25 Points

Radiology Receptor, Recurrence Stimulant Vector, Vesicle WOUND

LL Geigy Duplex VIP Black

19,4 Points

In 1972, Ciba-Geigy launched the product Ludiomil. It contained a new substance called maprotiline, a tetracyclic indicated for treating various types of depression. It helps to restore high-quality sleep and reduces anxiety, although it is not EMPLOYED SPECIFICALLY IN THE TREATMENT OF PANIC

16,2 Points

After treatment of 150 patients, however, an antidepressive effect became apparent. In September 1957, Kuhn presented the findings of his clinical tests at the second World Congress of Psychiatry in Zurich. One year later, imipramine, under the name Tofranil, became the first antidepressant to be launched. It was soon established GLOBALLY AS A WELL-TOLERATED STANDARD TREATMENT FOR ENDOG-ENOUS DEPRESSION OR MELAN- 14 Points

Before the launch of Tofranil, depression patients had to spend long periods in clinics and were often treated with electroshock therapy, as the only options were to stimulate or sedate them; it was impossible to restore their overall equilibrium and nor-MALIZE THEIR MOOD. WITH AN EFFICACY RATE OF OVER 80 PER CENT, TOFRANIL

12 Points SS10 Contextual f. t

The research on psychological changes carried out in the 1930s only bore fruit after the Second World War. In 1952, surgeon Henri Laborit discovered by chance that the molecule chlorpromazine alleviates shock caused by surgery and improves the mood of postoperative patients. Consequently, PSYCHIATRISTS BEGAN TO USE CHLORPROMA-ZINE TO TREAT UNSETTLED PATIENTS. IT WAS THE FIRST IN THE CLASS OF MEDICINES KNOWN

10,4 Points

Based on these experiences, further research by Geigy led to the discovery of another substance with significant potential: chlorimipramine. It was presented to psychiatrists at a congress in 1961, and met with great acclaim. After five-year trials in renowned clinics, the new tricyclic was brought onto the market in 1966 under the NAME ANAFRANIL. IN ADDITION TO DEPRESSION, THIS MEDICINE IS USED TO TREAT CONDITIONS SUCH AS OBSESSIVECOMPULSIVE DISORDER, PANIC ATTACKS, AGORAPHOBIA, CERTAIN TYPES OF BEDWETTING IN

LL Geigy Duplex VIP Black Italic

45 Points

32 Points

25 Points **SS08**

Alternate Arrows

80 Points **Agents** Blood **GYTOXAN**

Hemostasis Immunity **LYMPHATIC**

55 Points SS02 Closed C. c

Dialysis Endocrinology Fungicid **GLUCOSE**

Microbiology Neurotransmitter **Otolaryngology POTENTIATION**

- → **Sterility**
- **v Tachycardia**
- → **Urology**
- **v Vesicle, Vitamin**
- → ZOONOSIS

LL Geigy Duplex VIP Black Italic

14 Points

12 Points

19,4 Points

Due to remarkable physicochemical similarities, it was possible to define crucial basic structural requirements for a new substance. When, during the development phase in 1966, this drug proved to be poorly tolerated by rats and dogs – AS HAD ALSO BEEN THE CASE WITH CLINICALLY ACTIVE

16,2 Points

From 1953 to 1964, Geigy led the market for antirheumatics with its product Butazolidin (from phenylbutazone, which was discovered in 1946). When US pharmaceutical group Merck presented the one hundred times more active indomethacin in 1964, Geigy began the search for a new, highly active and well-tole-RATED ANTI-INFLAMMATORY. FIRST, GEIGY CHEMISTS COMPA-RED KNOWN NON-STEROIDAL Tolerability studies in healthy volunteers and the subsequent clinical trial confirmed the substance's activity and tolerability. Ciba-Geigy launched the product in Japan and Switzerland under the brand name Voltaren in 1974. Since then, it has become ESTABLISHED IN OVER 140 COUNTRIES AS A RELIABLE MEDICATION FOR MANY

In the recession of the 1970s, both Ciba-Geigy and Sandoz sought new ways of spreading risks rationally. The two companies examined numerous diversification options. In 1971, Sandoz entered the fitness business, acquiring a majority stake in John Valentine. The Exe-CUTIVE COMMITTEE SAW IN THIS PROJECT "THE ONLY IMMEDIATELY REALIZABLE DIVER-SIFICATION OPPORTUNITY" FOR THE PHAR-

10.4 Points

The pharmaceutical business proved to be largely resistant to economic fluctuations. Ciba-Geigy and Sandoz survived the recessions of the 1970s relatively unscathed. The oil crisis did not hit the corporations as a whole particularly hard, although energy costs did rise considerably. Only the industrial divisions – dyestuffs, chemicals, PLASTICS, ADDITIVES AND PIGMENTS – FACED SERI-OUS PROBLEMS WITH THE SUPPLY OF RAW MATERIALS. THE STRENGTH OF THE SWISS FRANC ALSO TOOK ITS TOLL ON BUSINESS: BETWEEN 1973 AND OCTOBER 1978, LL Geigy Duplex VIP Black, Black Italic

Anti-Protozaine Quinacrine $G_{23}H_{30}GIN_{3}O$ 4-Diamine

Technical Information

Latin	Afrikaans	Koyra Chiini	Soga	Open Type	aalt	Access All Alternates	ss04	Stylistic Set 4 (Alternate R)
Lutin	Albanian	Koyraboro Senni	Somali	Features	calt	Contextual Alternates	ss05	Stylistic Set 5 (Alternate S, s)
	Asturian	Langi	Spanish		case	Case-Sensitive Forms	ss06	Stylistic Set 6 (Alternate 2)
	Asu	Latvian	Swahili		ccmp	Glyph Composition/	ss07	Stylistic Set 7
	Basque	Lithuanian	Swedish			Decomposition		(Alternate Registered)
	Bemba	Lower Sorbian	Swiss German		clig	Contextual Ligatures	ss08	Stylistic Set 8
	Bena	Luo	Tachelhit		dlig	Discretionary Ligatures		(Alternate Arrow)
	Breton	Luxembourgish	Taita		-	Denominators	ss09	Stylistic Set 9
	Catalan	Luyia	Tasawaq		frac	Fractions		(Alternate Currency)
	Chiga	Machame	Teso		locl	Localized Forms	ss10	Stylistic Set 10 (Contextual f, t)
	Colognian	Makhuwa-Meetto	Turkish		nalt	Alternate Annotation Forms	ss11	Stylistic Set 11
	Cornish	Makonde	Upper Sorbian		numr	Numerators		(Tabular Fractions)
	Croatian	Malagasy	Uzbek		onum	Oldstyle Figures	ss12	Stylistic Set 12
	Czech	Maltese	Volapük		ordn	Ordinals		(Thin Brackets, Slash, Bar)
	Danish	Manx	Vunjo		ornm	Ornaments	ss19	Stylistic Set 19 (Swiss Franc)
	Dutch	Meru	Walser		salt	Stylistic Alternates	ss20	Stylistic Set 20 (Multiply)
	Embu	Morisyen	Welsh		ss01	Stylistic Set 1 (Single-Storey a)	subs	Subscript
	English	North	Western Frisian		ss02	Stylistic Set 2 (Closed c, C)	sups	Superscript
	Esperanto	Ndebele	Yoruba		ss03	Stylistic Set 3 (Alternate K, k)	zero	Slashed Zero
	Estonian	Northern Sami	Zarma					
	Faroese	Norwegian Bokmål	Zulu	Codepage	Please	e refer to the Technical Docume	nt	
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	Kamba	Shona						
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