DOCUMENT Informed Consent Form

OFFICIAL TITLE OF THE STUDY

Effect of Phosphoric Acid Etching Duration on the Performance of Direct Resin-Based Composite Restorations in Permanent Anterior Teeth: A Randomized Controlled Single-Center Trial

NCT NUMBER

NCT ID not yet assigned

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- 1 University Center for Dental Medicine Basel UZB
- 2 Mattenstrasse 40
- 3 CH-4058 Basel

# UZB Q

#### 4 Request to participate in dental research

- 5 Study title: Effect of Phosphoric Acid Etching Duration on the Performance
- 6 of Direct Resin-Based Composite Restorations in Permanent Anterior
- 7 Teeth: A Randomized Controlled Single-Center Trial
- 8
- 9 Layman's title: How does the etching time with phosphoric acid influence the
- 10 Behavior of tooth-colored resin fillings in anterior teeth? A clinical
- 11 Study
- 12
- 13 Dear Sir or Madam
- 14 We would like to inform you about a study on tooth-colored resin fillings for
- 15 front teeth and ask you whether you would like to take part in the examination.
- 16 tions. It is important for dentists to be aware of the effects of new interventional techniques.
- 17 methods order to further improve dental care.
- 18 We call such research a **clinical trial**<sup>1</sup>. In this study we want to
- 19 to find out whether the exposure time of a phosphoric acid gel has an influence on the quality of
- 20 plastic fillings on front teeth. Specifically, we would like to know whether longer or shorter
- 21 This gel has a longer application time and leads to less discoloration at the margins of the filling. This gel
- is used as standard in the production of resin fillings. Until now, each
- 23 However, it is not clear how long the optimum exposure time should be. Therefore compare
- 24 In this study, we used two different application times for the gel. You need one of these
- anterior filling. We would therefore like to ask you whether you would like to take part in this study.
- 26 Your participation is voluntary. The following **patient information** is intended to help you decide
- 27 help you with your planning. You can discuss any questions you may have about participating in the study with the investigator.
- 28 the test dentist. This is what we call the dentists who are responsible for a
- 29 study and who are responsible for you in the context of this study. If you participate
- 30 please sign the **declaration of consent** at the end. With your un
- 31 By signing below, you confirm that you have read and understood the patient information.
- 32 If you do not understand something, please ask the examining dentist. 33

<sup>&</sup>lt;sup>1</sup> The law uses the term "clinical trial" for this purpose.

- 34 The patient information and declaration of consent consist of four parts:
- 35 Part 1 The most important facts in brief
- 36 Part 2 This is what it's all about in detail: Information on
- the study
- 37 Part 3 Data protection and insurance cover
- 38 Part 4 Declaration of consent
- 39
- 40 If you read **Part 1**, you will get an overview of the study.
- 41 In Part 2, we explain the entire process and background of the study in detail.
- 42 **Part 3** contains information on data and insurance protection.
- 43 With your signature at the end of the document, **part 4**, you confirm that you have understood everything.
- 44 and to participate.
- 45 This study was initiated by the University Center for Dental Medicine Basel UZB. This
- 46 Institution is called the sponsor. The sponsor is responsible for, manages and finances a study program.
- 47 the.

- 49 In the context of this study is responsible for you:
- 50 Name PD Dr. med. dent. Florin Eggmann
- 51 Address UZB, Mattenstr. 40, 4058 Basel
- 52 Telephone 061 267 26 80
- 53 079 374 13 81 (available 24 hours a day)
- 54 e-mail florin.eggmann@unibas.ch

#### 55 Part 1:

#### 56 The most important facts in brief

#### 57 1 Why are we this study?

- 58 You have an anterior tooth that is missing due to caries, a defective filling or a damaged tooth.
- 59 a tooth-colored plastic filling is required for the desired change in shape. That's why we ask
- 60 Please indicate here whether you would like to participate in this study.
- 61 When restoring a tooth with a resin filling, the tooth must be pre-treated.
- 62 be applied. Pre-treatment ensures that the filling adheres well to the tooth. The pretreatment
- 63 The standard is to treat the tooth by applying a special gel for a short time.
- 64 time on the tooth. This gel contains phosphoric acid. It is currently unclear how
- 65 optimum exposure time of the phosphoric acid gel.
- 66 In this clinical study, we are investigating how the duration of exposure to the phosphorus-
- acid gel the susceptibility of the fillings to marginal discoloration. Further investigated
- 68 In this study, we examine the overall behavior of anterior fillings over time.
- 69 This examination of the filling quality is based on a comprehensive assessment of the
- 70 fillings and the filled teeth. In chapter 4 you will learn more about the scientific
- 71 Background to the study.

#### 72 2. what do you have to do when you take part?

- 73 Your participation in this study will last 5 years. We will visit you for 6 study visits
- 74 invite you. 5 of these 6 appointments are part of your general dental treatment
- and also take place independently of your participation in the study. The other 1 appointment is a
- 76 additional appointment and is only part of the study. Placement of the filling including documentation
- takes approx. 45-90 minutes. The first control appointment lasts 20-60 minutes. The four control appointments
- 78 mine take about 30 minutes. The number of appointments is shown in the illustration in
- 79 **Chapter 5**.
- 80 If you decide to take part, you will be randomly assigned to one of 2 groups.
- 81 They belong to either the test group or the control group. They are not wis-
- to which group you belong. In the test group, you will be given the interventi-
- 83 The phosphoric acid gel is treated using a method that involves a very short exposure time
- 84 (10 seconds). In the control group, the phosphoric acid gel works longer on your tooth
- 85 (up to max. 30 seconds).

#### 86 **Chapter 5** provides more information on the study process and

procedure. 87

#### 88 3. what are the benefits and risks with participation?

#### 89 Benefit

- 90 You have no direct benefit from participating in the clinical trial. However, it is
- 91 It is possible that your participation will help future patients. The Nut-
- 92 The main advantage of the study is that the knowledge gained from the study
- 93 methods for the fabrication of tooth-colored resin fillings.
- 94 People who want to have their teeth colored in the future will benefit from improved treatment methods.
- 95 need a filling.
- 96 Risk
- 97 All materials used are approved and certified in Switzerland. The interventi-
- 98 The method of shortening the exposure time of the phosphoric acid gel has been proven in laboratory studies.
- 99 comprehensively examined.
- 100 Side effects may occur regardless of whether you use the intervention method or not.
- 101 the shortened exposure time of the phosphoric acid gel or the treatment method
- 102 of the control group, which involves a longer exposure time. We know
- 103 Perhaps not all the risks and side effects of the intervention method of shortening
- 104 the exposure time of the phosphoric acid gel. The following risks and side effects have been
- are known in the treatment with tooth-colored resin fillings:
- Hypersensitivity or pain after placement of the filling.
- Chipping, fractures of the filling material and/or the adjacent tooth sub stance.
- Partial or complete loss of the adhesive bond between the filling and the tooth, resulting in
   partial or complete loss of the filling.
- Air pockets in the filling material or underneath the filling
- Minor, superficial injury to the gums.
- 113 Ingestion of material.
- Allergic reactions to components of the filling materials (e.g. methacrylate-
- 115 plastics), the local anesthetic or the auxiliary parts used during the treatment.
- 116 be set.
- 117
- 118 **Chapter 6** contains further information on risks and burdens.

#### 120 Part 2:

#### 121 This is what it's all about in detail: Information on the study

#### **122** 4 The scientific background of the study

#### 123 4.1 Background: Why are we this study?

- 124 Adults often have front teeth that require a front tooth filling.
- 125 Such an anterior filling may be necessary due to caries (a "hole in the tooth").
- 126 tooth", a defective filling that needs to be replaced, or because of a desired
- 127 Change in shape of an anterior tooth. If you need an anterior filling, you get
- 128 typically a tooth-colored resin filling. When placing such an artificial
- filling, the tooth is routinely prepared with a gel containing phosphoric acid.
- 130 deals.
- 131 This procedure has been established for many years. There is already research in humans on
- 132 Use of phosphoric acid gels when placing resin fillings. When using
- 133 However, when using today's most common bonding agents ("dental adhesive"), it is
- 134 It is unclear how long the optimal exposure time of the phosphoric acid gel is. Previous studies that
- 135 in the laboratory have shown that the adhesive bond of the restorative material
- 136 on the enamel (the outer layer of the tooth) with a shortened exposure time is the same.
- 137 is as good as with a longer exposure time. In the so-called dentine, which is also called the dentin
- 138 and is located underneath the enamel, the shortened exposure time of possible
- 139 advantages for the adhesive bond. However, clinical studies are currently lacking
- 140 to this. It is therefore currently unclear how a shorter exposure time of the phosphoric acid gel
- 141 the susceptibility of the fillings to marginal discoloration.
- 142 In this study, we are therefore investigating whether the intervention method of a shortened onset
- 143 The longer exposure time of the phosphoric acid gel just as effective as a longer exposure time.
- 144 All substances and materials in the study are registered in Switzerland.
- 145 certified and approved. They are routinely used worldwide for tooth-colored fillings.
- 146 used.
- 147 In this study, we are also investigating how anterior fillings as a whole
- 148 over time. This examination of the filling quality is based on a comprehensive
- 149 Send assessment of fillings and filled teeth. 150

#### 152 4.2 Structure of the study: How do we proceed?

- 153 In our study, participants are randomly divided into groups. This is important,
- to obtain reliable results from the study. This is called randomization. Each
- 155 group receives a different treatment. There are 2 groups in our study:
- **Group 1** (experimental group): In this group, the phosphoric acid gel
- 157 is applied simultaneously to the enamel and dentin. The application time
- 158 of the gel on both the enamel and the dentin is a total of
- 159 10 seconds.
- 160 **Group 2** (control group): In this group, the phosphoric acid gel is first
- 161 to the enamel and only shortly afterwards to the dentin. The
- 162 The gel is applied to the enamel for 15-30 seconds and to the tooth surface for 10-15 seconds.
- 163 seconds on the dentin.
- 164 The study is a so-called blinded study. In this case, "blinded" means that
- 165 neither the participants nor the investigators know in which
- 166 group the participants were divided into. The practitioners who had the one-
- 167 However, they are not blinded, as they do not know which intervention is being used.
- 168 tion method.
- 169 The participants therefore do not know which group they belong to. And the sub
- 170 The examiners who evaluate the results have no knowledge of them.
- 171 This approach is intended to ensure that the results remain as objective as possible.
- 172 Randomization and blinding allow us to reliably assess how well
- 173 the intervention method is really effective.

#### 174 4.3 Regulations on scientific research involving human subjects

- 175 We are conducting this study in accordance with the laws in Switzerland (Humanfor-
- 176 Protection Act, data protection laws). In addition, we observe all internationally recognized
- 177 guidelines. The responsible ethics committee has reviewed and approved the study.
- Our study is a national study. The study is only being conducted at one location, the UZB, inSwitzerland.
- 180 A description of this study can also be found on the website of the Federal Office for
- 181 Health at www.kofam.ch under the SNCTP registration number .....or the BASEC-
- 182 Number.....
- 183

#### 5. course of the study 184

185	5.1 What do you have to do if you in the study?				
186	Participation in the study is voluntary and lasts 5 years. You must adhere to the procedure				
187 188	plan ( $\rightarrow$ Chapter 5.2) and also to all specifications that your dentist has issued. dentist does.				
189	You must inform your test dentist,				
190 191 192	<ul> <li>if your state of health changes, e.g. if you get worse, or</li> <li>if you have new complaints; this also applies if you discontinue the study prematurely.</li> <li>(→ Chapters 5.3 and 5.4);</li> </ul>				
193	- if you get toothache on the treated tooth or if this tooth				
194 195	<ul> <li>tooth becomes hypersensitive;</li> <li>If a dentist performs a treatment on the treated study patient, he/she must</li> </ul>				
195	tooth would like to perform;				
197	- when you notice the loss of adhesion of the filling;				
198	- if the filling is partially or completely lost (breaks off or becomes loose)				
199	detaches from the tooth);				
200	<ul> <li>if you become pregnant or are breastfeeding.</li> </ul>				
201	You must also note the following:				
202	- You may not undergo dental whitening during your participation.				
203	have your teeth whitened. (Note: The desire for dental teeth whitening				
204	is generally not a criterion for exclusion. However, the tooth whitening				
205	at least two weeks before the resin filling is placed.				
206	be).				

#### 207 5.2 What happens during the appointments?

In the course of your participation, you will come to us 6 times for a study visit. 5 of these 208 209 appointments are part of your general treatment and are also paid independently of your 210 Study participation. The other 1 appointment is an additional appointment and includes

- 211
- for the research study only. An appointment lasts about 30-45 minutes on average. The
- 212 The sequence of dates is shown in the illustration below.
- 213 We do the following for all appointments:
- 214 We will answer your questions. •
- 215 We will ask you questions about your state of health. •
- 216 We examine your teeth and gums. •
- 217 We use dry ice to check whether the tooth is sensitive to cold. •
- 218 We take photos of the front teeth. •

- At the first appointment, we will check whether you meet the requirements for participation in the study.
- 221 fulfill. In addition, we will explain the exact process of the
- study. If you wish, you can take a few days after this appointment,
- to in peace about your participation.
- If you decide to take part voluntarily, you will be given the following information at the second appointment
- fillings are used. We examine these fillings at the following appointments
- 226 very precisely. In doing so, we evaluate them according to defined criteria in order to find out whether ver-
- colorations occur at the edges of the fillings and how well the materials used
- function.
- 229 No data from your medical records will be used or analyzed for this study.
- 230 The following schedule shows all the necessary dates:

#### 231 Schedule: general and additional examinations

Study visit/Ter- min	The current term	1	2	3	4	5	6
Approxima te duration (hours)	0.5	0.75-1.5	0.3-1	0.5	0.5	0.5	0.5
Query on health stood	\$	\$	+	\$	✓	✓	✓
Assessmen t of tooth sensitivity	5	1	+	1	1	1	✓
Cold test tooth	✓	✓	+	✓	√	1	1
Placing dental filling		✓					
Post- polishing dental filling			(+)				
Evaluation dental filling			+	✓	1	1	\$
Photos tooth		1	+	1	1	1	✓

- 233
- 234 The schedule on the previous page shows all dates. The general examinations
- 235 courses are with a tick ( / ). The additional study-specific un
- 236 examinations are with a plus sign (+ ). Only these studies represent
- 237 therefore represent an additional expense for you.
- 238 We arrange the appointments together with you. You receive a precise overview
- about the dates. We kindly ask you to inform us quickly if you still need to make an appointment.
- 240 date important reasons.

#### 241 5.3 When does participation in the study end?

- For you, participation lasts 5 years and ends after the 6th date. You can choose your part
- 243 You can also stop taking the program earlier at any time ( $\rightarrow$  Chapter 5.4). You do not have to explain why
- you no longer wish to participate. If you would like to end your participation earlier yourself
- 245 If you have any questions, please speak to your investigator.
- 246 If you end your participation prematurely, this has no influence on your further dental treatment.
- 247 medical care and treatment ( $\rightarrow$  Chapter 5.4 for alternative treatment options).
- nes). In this case, we will carry out a final examination for your safety.
- 249 If you discontinue the study earlier please contact your investigator // your investigator's dentist
- continue to inform you if your state of health changes, e.g. if you feel unwell.
- 251 you feel worse or if you have new complaints. If your participation is premature
- ends, we will retain the data collected up to that point (e.g. information on the status of the payer).
- and the filling and photographs of the tooth with the filling) are still available for the study.
- evaluate. Your study data and samples will remain encrypted ( $\rightarrow$  Chapter 9).
- 255 We may also have to ask you to end the study early. This is
- 256 for exampleif you want to use a material that is used for the fabrication of tooth-colored
- 257 plastic filling in the study.

#### 258 5.4 What happens if you do not wish to participate?

- Even if you are not part in this study, we will treat and care for you dentally.
- 260 medical treatment in accordance with current standards. If you do not take part in the study

261 If you would like to take part in a clinical trial, your dentist will advise you on alternative options.

- treatment options.
- 263 5.5 Pregnancy

Except in emergencies, pregnant and breastfeeding women are generally not allowed to eat.of fillings.

- 266 For women who may become pregnant: At the time of the filling placement, you may
- 267 not be pregnant. We will therefore provide you with a pregnancy test,

- to be able to rule out pregnancy. In addition, at the time of the
- filling placement. 270
- 271 If pregnancy or breastfeeding occurs during the follow-up period
- 272 participation in the study is still possible. In this case, the dates can be
- 273 for the follow-up examinations, which only include a short dental check-up, after consultation with the dentist.
- The dosage can be adjusted in consultation with you and according to your doctor's recommendation.
- 275 You will discuss these questions with your examining dentist. 276

#### 277 6 Risks, burdens and side effects

#### 278 6.1 What risks and stresses can occur?

- 279 There are risks and burdens involved in participating in this study, as with any medical study.
- treatment. Some risks are already known, others are still unknown. These
- 281 Uncertainty is not unusual in the context of studies. In chapter 6.2 you will find a
- 282 List of the most common and most serious risks. Many side effects are (dental) medical
- treatable. During the study, we will inform you about all new findings on risks and treatment options.and side effects.
- With a new intervention method, it is possible that there are risks that we have not yet identified.know.
- 287 To date, there have been no studies in the dental literature on the effects of
- 288 The shorter exposure time of phosphoric acid gel has a positive effect. However, the dental
- adhesion promoters that we use, also for application without prior use of
- 290 Phosphoric acid approved. Especially for fillings in the cervical area and fillings in
- 291 Many dentists use these bonding agents without phos-
- 292 phosphoric acid gel. This indicates that the shortened exposure time of the phosphoric acid
- 293 gel is highly unlikely to pose any serious risks.
- 294 In addition, there are risks associated with the medical examinations that we are investigating in this study.
- do. You will already be familiar with some of the tests. In **chapter 6.3** you will find a
- List of these risks of the investigations. 297

# 2986. 2The most frequent and most serious risks posed by the in299tervention method

- 300 Here you will find information about the most common and most serious side effects,
- that we already know.

#### 302 We use the following descriptions for this:

very often	We find the side effect in more than 10 people out of 100 (more than 10%).
frequently	We find the side effect in 1 to 10 people out of 100 (1%-10%).
occasionally	We find the side effect in 1 to 10 people out of 1,000 (0.1%-1%).
rare	We find the side effect in 1 to 10 people out of 10,000 (0.01%-0.1%).
very rare	We find the side effect in less than 1 person in 10,000 (less than 0.01%).

#### 303

- 304 Common side effects are:
- 305 Hypersensitivity or pain after placement of the filling.
- 306 Consequences: Depending on the degree of severity, the course of the disease will be described in additional
- 307The patient is observed at regular intervals or an intervention required. If required308a painkiller that you tolerate well. If strong
- 309 If pain occurs, the filling is replaced or an additional
- 310 root canal treatment. 311
- 312 Occasional side effects are:

#### 313 - Chipping, fractures of the filling material and/or the adjacent tooth sub-

314 stance.

315

319

320

321

328

331

• Consequences: The filling must repaired or replaced.

## Partial or complete loss of the adhesive bond between filling and tooth, resulting in partial or complete loss of the filling.

- 318 Consequences: The filling must be repaired or replaced.
  - Air pockets in the filling material or underneath the filling
    - Consequences: Depending on the location and size of the air pocket, the filling repaired or replaced.
- 322 Minor, superficial injury to the gums
- 323 o Consequences: Such injuries usually do not require treatment and
  324 on their own within about 1-2 weeks. If required
  325 You can use a wound ointment that you can apply to the gums and/or a
- 326 Mouthwash solution that supports healing. 327

#### 329 Rare side effects are:

- Ingestion of material.
  - Consequences: Ingestion does not usually lead to any problems,

### as no side effects are to be expected due to the small quantities. 333 Very rare side effects are:

- Allergic reactions to components of the filling materials (e.g. Methac-
- rylate plastics), the local anesthetic or the auxiliary parts used in the treatment.can be used.

338	<ul> <li>Consequences: Patients with known or suspected allergies to</li> </ul>
339	These substances are excluded from treatment with such materials.
340	closed. Nevertheless, despite these precautionary measures, in rare cases
341	severe allergic reactions, such as anaphylactic shock, can occur.
342	shock, which require immediate emergency treatment.

#### 343 6.3 Risks and burdens from examinations in the stuthe

- 344
- 345 We carry out various dental examinations for this study ( $\rightarrow$  Chapter
- 346 5.2). These examinations are tried and tested procedures. Nevertheless, they can involve risks and
- 347 They can have a negative impact, i.e. they can unpleasant. In this study there are the following
- 348 Risks and burdens:
- 349 Brief pain stimulus due to the cold test on the tooth
- 350 Additional examination date

#### 351 7 Financing and compensation

- 352 This study is initiated by the sponsor UZB and is jointly organized by the UZB and the
- 353 paid by the company Ivoclar Vivadent AG. The filling materials and selected instruments for
- 354 Ivoclar Vivadent AG will provide you with the necessary tools for placing and polishing the fillings free of charge.
- 355 made available.
- 356 The researchers involved have no direct financial benefit from the implementation of the project.
- 357 conduct of this study.
- 358 You have to cover the cost of the plastic filling placed during the study yourself.
- 359 to cover the costs. This is done according to the usual fee model for dental treatment in the
- 360 Switzerland. Payment can be made directly out of your own pocket, via the insurance company or through social security.
- 361 Depending on the individual circumstances.
- 362 For the first follow-up examination after placement of the filling, which is used to assess the stu-
- 363 is necessary and is not of the regular check-up appointments, the patient receives a
- 364 You will receive a fee of CHF 90.00 per hour. Shorter appointments will be charged accordingly.
- 365 proportionately remunerated.
- 366 In addition, the travel costs for the first follow-up appointment after the placement
- 367 of up to CHF 50.00 for 2nd class public transport.
- 368 You will not be any additional financial incentives. Your participation in the
- 369 The study should be conducted out of genuine interest in research and not for financial compensation.
- 370 be carried out.

#### 8. results from the study 371

- 372 There are results that concern you These results will be communicated to you by your dentist.
- 373 Your test dentist with. There are also incidental findings. Incidental findings are "concomitant results",
- 374 that are not intended. These can changes to the oral mucosa, for example. We
- 375 inform you if these random results are relevant to your health.
- 376 For example, we will inform you if we happen to discover an illness of which you are aware.
- 377 we do not yet know and which we can treat. // We will also inform you when we have a Version 2.0. 19.04.2025 Study information Page /1323

- 378 Find the risk of a disease that can be prevented by taking preventive measures.
- 379 can. If you *do not* wish to be informed, please discuss this with your dentist.
- 380 your examining dentist. Some incidental findings are always reported, for example,
- 381 if other persons are endangered or if it must be reported by law.
- 382 There are also the overall results of the study, which are based on the data from all participants.
- 383 come. This includes, for example, knowing more about the behavior of the front
- dental fillings over time ( $\rightarrow$  Chapter 4.1). These results will affect you and your
- health directly. At the end of the study, your investigator dentist will give you
- but would be happy to send you a summary of the overall results of the study if you wish.
- the results. In addition, the results are presented in layman's terms after the end of the study.
- 388 Language published (link or reference, expected from 2031). 389

#### 390 Part 3:

#### 391 Data protection and insurance cover

#### **392** 9. Protection of data

- 393 We protect your data (e.g. information on the condition of your teeth and other dental data).
- information from your medical history). For the protection of data, the
- 395 Switzerland has strict legal regulations.
- 396 The Swiss Data Protection Act gives you the right to information, rectification and
- 397 Receipt of your data that is collected, processed and forwarded as part of the study.
- 398 These rights may be exercised in exceptional cases due to other legal or regulatory requirements.
- 399 requirements cannot always be guaranteed. If you have any questions, please contact
- 400 please contact your test .

#### 401 9.1 Encryption of data

- 402 Each study generates data from the investigations (e.g. information on the condition
- 403 of the teeth and the filling). This data is documented. This is usually done electro-
- 404 nically in large tables, the so-called "data collection sheets". All data is
- 405 documented in encrypted form. "Encrypted" means that personal information that you
- 406 directly identifiable are stored *separately* from the test results.
- 407 the. For this purpose, there is a list (key list) that each person is assigned a unique code.
- 408 identified. For example, your name, date of birth or place of residence are *not* directly listed in the database.
- 409 data collection form. This key list remains at the institute for a period of 20 years.
- 410 UZB and is then destroyed. No one else receives this key list.
- 411 Special exceptions are regulated in chapter 9.5.
- 412 If we pass on data for the purpose of this study to other professionals or organizations we will not be able to use it.
- 413 organizations that carry out further investigations then the data is always encrypted.
- 414 and your personal data is protected. This also applies if the data is transferred abroad.
- 415 be passed on.
- 416

- 417 9.2 Safe handling of data during the study
- 418 The sponsor UZB is responsible for the secure handling of your data from this
- 419 Study. He is responsible for ensuring that the applicable laws, e.g. data protection laws,
- 420 must complied with. This also applies if (encrypted) data is used for investigations in other countries.
- 421 where data protection laws less favorable. This is how the sponsor protects
- 422 your data in this study:
- 423 In this study, your data is recorded and transmitted electronically. The data is stored in
- 424 in an encrypted form on an ISO-certified server in the Netherlands (data
- filling quality) and a backup copy of this data on an ISO-certified storage medium.
- 426 on a server in Ireland. The image data (photographs that exclusively show the teeth,
- 427 gums and the oral mucosa) are located in a password-protected
- 428 folder. Only the study team has access to it. They are stored in Microsoft
- 429 OneDrive, a secure cloud storage service. The image data is not only stored in a
- 430 stored in a single location, but on several servers in different Microsoft repositories.
- 431 centers around the world including in North America, South America, Europe, Asia
- and Australia. Nevertheless, there is always a certain residual risk that strangers may be on
- 433 access your personal data (e.g. risk of "hacking").
- 434 Sometimes it is important that your family doctor collects data on your medical history.
- the investigator dentist. This also applies to other doctors who
- 436 You treat. By giving your consent at the end of the document, you authorize this.

#### 437 9.3 Secure handling of data after the end of the study

- 438 The sponsor remains responsible for the safe handling of the study after the end of the study.
- 439 Your data. The law stipulates that all study documents, e.g. the data collection
- 440 The data, including the data sheets, stored for at least 20 years.
- 441 At the end of this long period, study data remains encrypted. Health-relevant data
- of your medical history, including from this study, are and remain important for your treatment.
- 443 always accessible.
- 444 Once a study has been completed, the results are usually published in scientific journals.
- The results are published. The results are also reviewed by other experts.
- 446 Your encrypted data must be forwarded to these specialists. The
- 447 However, data may not used for new research purposes. Therefore
- 448 it would require your separate consent ( $\rightarrow$  Chapter 9.4).

# 4499.4Further use and disclosure of your data in other,450future studies

- 451 Your data from this study is very important for future research. Data which
- 452 used for this experiment can possibly be used for other experiments.
- 453 used and/or passed on (also abroad).

- 454 Please read the additional declaration of consent at the end of the document carefully
- 455 by. Please sign the consent form if you wish to carry out further research with your data.
- 456 in the future. Even if you do not agree, you can still
- in the study.

#### 458 9.5 Inspection rights during inspections

- 459 The implementation of this study can be verified. The review is carried out by
- 460 authorities such as the responsible ethics committee. The sponsor must also carry out such reviews.
- to the quality of this study and the results.
- 462 For this purpose, a small number of specially trained people are given insight into your personal
- 463 data and your medical history. The data is therefore *not* required for this review.
- 464 encrypted. The people who see your unencrypted data are subject to confidentiality.
- 465 obligation.
- 466 As a study participant, you have the right to view your data at any time. 467

#### 468 10. insurance cover

- 469 In the event of damage attributable to an approved and medically standardized
- 470 medicinal product / medical device or are also attributable to the use of a standard
- 471 therapy would have occurred, the same liability rules apply as in the case of treatment
- 472 outside of a study. In such a case, the liability insurance of the
- 473 UZB the costs / compensation.

#### 475 Part 4:

#### 476 Declarations of consent

#### 477 This consent consists of two independent declarations of consent:

- 478 Informed consent for participation in this study *Effect of Phosphoric Acid Etching*
- 479 Duration on the Performance of Direct Res-in-Based Composite Restorations in Perma-
- 480 nent Anterior Teeth: A Randomized Controlled Single-Center Trial
- 481 Declaration of consent for the further use and disclosure of data from this482 Study in coded form for further research.
- 483 Please read this form carefully. Please ask us if there is anything you do not
- 484 or if there is anything else you would like to know. To participate, your written
- 485 Consent required.

#### 486 Declaration of consent to participate in the study

BASEC number	
Title of the study	Effect of Phosphoric Acid Etching Duration on the Performance of Direct Res-in-Based Composite Restorations in Permanent Anterior Teeth: A Randomized Controlled Single-Center Trial
Layman-understandable title	How does the etching time with phosphoric acid influence the behavior of tooth-colored resin fillings in anterior teeth? A clinical study
<b>Responsible institution</b> (Sponsor with address)	University Center for Dental Medicine Basel UZB Mattenstrasse 40 CH-4058 Basel
Place of implementation	University Center for Dental Medicine Basel UZB Mattenstrasse 40 CH-4058 Basel
Examining dentist at the place of study	PD Dr. med. dent. Florin Eggmann
: Surname and first name in block capitals: Date of birth:	

487 488	-	I have received verbal and written information about the study, namely by the test dentist who signs below. 489
490 490		The investigator has explained to me the purpose, procedure and risks of the
490 491	-	study and the treatment method. 492
493	_	I am taking in the study voluntarily.
494	-	
495	-	The examining dentist has explained to me which standard treatments are possible.
496		there are outside the study. 497
498	-	I had enough time to this decision. I keep the written in
499		formation and receive a copy of my written declaration of consent. 500
501	-	I can end my participation at any time. I don't have to explain why. Also
502		if I stop participating, I will continue to receive my medical treatment.
503		The data up to this point will be analyzed as part of the study.
504		valued.
505		
506	-	If I resign, the data remains encrypted. 507
508	-	If it better for my health, the examining dentist can give me the following information
509		doctor the study at any time. 510
511	-	I understand that my data will only be forwarded in encrypted form for this study.
512		are sent abroad. The sponsor shall ensure that the data
513		protection is complied with in accordance with Swiss
standa	rds.	514
515	-	In case of results // In case of results and/or incidental findings that directly affect my health
516 with		I will be informed of any changes that affect my health. If I do not wish to be informed, I discuss this
517		my test . 518
519	-	My general practitioner may use data from my medical history that is required for the study.
520		that are important the investigator. This also applies to an-
521		other doctors who treat me. 522
523	-	The responsible experts of the sponsor, the Ethics Committee and the Drug
524		Swissmedic may view my unencrypted data for inspection. All
525		these persons are subject to a duty of
	ntia	lity. 526
527	-	The liability insurance of the institution UZB insures possible damages. 528

Place, date	Surname and first name of in block capitals
	Signature of participant

- 531 **Confirmation of the examining :** I hereby confirm that I have completed the-
- 532 The nature, significance and scope of the study is explained to this participant
- 533 have. I confirm that I have fulfilled all obligations in connection with this study.
- 534 accordance with Swiss law. Should I learn of any aspects in the course of the study,
- 535 which influence the participant's willingness to take part in the study.
- 536 I will her/him of this immediately.

Place, date	Surname and first name of the test in block capitals
	Signature of the examining dentist

#### 538 Declaration of consent for further use and/or disclosure

#### 539 of data in encrypted form

- 540 This consent does not concern you in the sense of personal participation in a study. ( $\rightarrow$
- 541 Chapter 9.4 of the patient information).
- 542 "Further use" means that your data will be stored beyond the time of your participation in the study.
- and can be used in encrypted form for further research. The
- 544 can mean, for example, that examination results from you that were obtained during dental check-ups
- 545 were statistically analyzed together with a large number of other values.
- 546 or new tests are carried out with it.
- 547 "Disclosure" means that your data is passed on to other research persons or research institutes.
- 548 institutions in encrypted form for further research projects.
- 549 fen. These other research persons or research institutions can also be included in the training program.
- 550 country. It is the sponsor's responsibility to ensure that this country has an adequate
- 551 level of data protection comparable to that in Switzerland. 552

	BASEC number:	
	Title of the study	Effect of Phosphoric Acid Etching Duration on the Performance of Direct Resin-Based Composite Restorations in Permanent Anterior Teeth: A Randomized Controlled Single-Center Trial
	Layman-understandable title	How does the etching time with phosphoric acid influence the behavior of tooth-colored resin fillings in anterior teeth? A clinical study
553	<b>Participant:</b> Surname and first name in block capitals: Date of birth:	
553 554 555 556 557 558 559	<ul> <li>I authorize the use of my coded data and from and passed on (also abroad) for further use in may.</li> <li>I understand that the data is encrypted and the is maintained.</li> </ul>	medical research
560 562	- If I resign, the data remains encrypted. 561	

# Place, date Surname and first name of in block capitals Signature of participant 564

- 565 **Confirmation of the test :** I confirm that I am authorized to participate in the test.
- the nature, significance and scope of the further use and/or further processing of the data.
- 567 of samples and/or (genetic) data.

Place, date	Surname and first name of the test dentist in block capitals
	Signature of the examining dentist