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**¹. 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

¹ 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 numberor 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 | if your state of health changes, e.g. if you get worse, or if you have new complaints; this also applies if you discontinue the study prematurely. (→ Chapters 5.3 and 5.4); | | | | |
| 193 | - if you get toothache on the treated tooth or if this tooth | | | | |
| 194 195 | tooth becomes hypersensitive; If a dentist performs a treatment on the treated study patient, he/she must | | | | |
| 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 | if you become pregnant or are breastfeeding. | | | | |
| 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 | Consequences: Patients with known or suspected allergies to |
|-----|---|
| 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 |
| Responsible institution (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 | Participant: Surname and first name in block capitals: Date of birth: | |
| 553 554 555 556 557 558 559 | I authorize the use of my coded data and from and passed on (also abroad) for further use in may. I understand that the data is encrypted and the is maintained. | 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 |
| | |
| | |