

**Consent to Participate in a Research Study**

***Clinical Acceptance of the Artificial Pancreas: The International Diabetes Closed Loop (iDCL) Trial - A Randomized Clinical Trial to Assess the Efficacy of Adjunctive Closed Loop Control Versus Sensor-Augmented Pump Therapy in the Management of Type 1 Diabetes***

1 Today, your child is being asked to take part in this **research** study because he/she has type 1  
2 diabetes and uses an insulin pump. The goal of this research is to get new knowledge that may  
3 help other people, but it is not the same as treatment of type 1 diabetes. We want to find what  
4 works best for treating your child and other children with this condition.

5  
6 Your child’s study team will talk with you about this research and this document. Please take  
7 your time deciding whether you want your child to participate in this research and please  
8 carefully read this document.

9  
10 Before you decide to let your child take part in this study, we suggest you speak with friends and  
11 family members about it. If you do not understand all the information, please ask your child’s  
12 study doctor or nurse to explain. If your child is taking part in another study, please tell us right  
13 away.

14  
15 **NON-PARTICIPATION STATEMENT**

16 Participation in this study is voluntary and you and your child must agree to take part. If you or  
17 your child later decide to stop participation in this research that will happen immediately. No  
18 penalty or loss of medical care will result from your decision. While the study is occurring your  
19 child may continue to receive medical care not related to this study.

20  
21 **WHO IS DOING THE STUDY**

22 Your child’s study team will carry out this study. Their names are listed on the Cover Page of  
23 this form. The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK),  
24 which is part of the federal government, is paying for this research. This funding will be used by  
25 your doctor’s office and other clinical centers to conduct the research study and by the Jaeb  
26 Center for Health Research to coordinate the study

27  
28 **WHY ARE WE DOING THIS STUDY?**

29 The purpose of this study is to see if the use of an automated insulin delivery system (“study  
30 system”) can safely and successfully manage blood sugars. This type of system is also referred  
31 to as an artificial pancreas or a closed-loop system. The name of the study system is inControl  
32 The system consists of (1) an insulin pump that delivers insulin, (2) a continuous glucose  
33 monitor or CGM that measures your sugar level, and (3) software that determines how much  
34 insulin will be given.

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36

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The CGM sensor has a thin needle that is inserted just under the skin. It measures the glucose in the fluid under the skin and shows this information every 5 minutes. The sensor needs to be changed about every 7 days. The insulin pump has a catheter that is inserted under the skin. It needs to be changed about every 3 days. This may be similar to the insulin pump infusion set you are already using.

The study system is considered experimental and can only be used for research. The U.S. Food and Drug Administration has approved its use in this research study.

We previously tested a version of this system in about 400 individuals. They used a similar version of the system in other studies for shorter periods of time at home. We did not find an increased risk for high or low blood sugars or other problems. We are now ready to further test the system at home with more people for a longer period.

60

**HOW MANY CHILDREN ARE WE EXPECTING TO TAKE PART IN THIS STUDY?**

61 We expect about 126 people, including children, to take part in this study at 7 different clinical  
62 centers in the United States and Europe.  
63

64

**WHO CAN PARTICIPATE IN THE STUDY?**

65 To take part in this study, your child must:  
66

- 67 1. Be at least 14 years old
- 68 2. Have type 1 diabetes and have used insulin for at least one year
- 69 3. Have used an insulin pump for at least the last 6 months
- 70 4. Have an HbA1c level <10.5% (a test of blood sugar control over the last 3 months)
- 71 5. Be willing to connect the study smartphone to the internet at least once per week either
- 72 using your Wi-Fi or using a cell phone data plan provided to you
- 73 6. Not take any medicine but insulin to lower blood sugar either now or during the study

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- 74 7. Not have immediate family members employed by TypeZero Technologies, LLC.
- 75 8. Not have an immediate family member who is directly involved in the study.
- 76 9. Be willing not to participate in another study at the same time as this study
- 77 10. Be willing to follow the procedures that will be described in the next sections
- 78

79 There are some conditions that may prevent your child from being part of the study. Your study  
80 doctor will check if your child has these or not and make sure your child is healthy enough to  
81 take part in this study. If your child is pregnant, she cannot participate. If your child is able to  
82 get pregnant we will do a urine test to be sure she is not pregnant before entering the study.

83 **WHAT HAPPENS IF I AGREE TO LET MY CHILD TAKE PART IN THIS STUDY?**

84 About half of the individuals in the study will use the closed-loop study system. The other  
85 individuals will use the CGM and insulin pump only, which we refer to as sensor-augmented  
86 pump (SAP).

87  
88  
89 This study will take about 13-17 weeks for your child to complete. The next sections list what will  
90 happen during the study.

91  
92 **Screening Visit**

93 If your child decides to take part in the study, you will sign this consent form. Then we will ask  
94 you and your child some questions and your child will have some tests done to make sure he/she  
95 qualifies and it is safe for him/her to be in this study.

96  
97 These include the following:

- 98 • Collection of information about your child: This may include contact information,  
99 diabetes history, past and current medical conditions, surgical procedures, menstrual  
100 history (females), allergies, medications and supplements, family history, social history  
101 (including drinking, smoking and drug habits), and whether or not your child has various  
102 symptoms. Your child also will also be asked about their pump settings and average daily  
103 insulin use over the past week.
- 104 • Physical exam (height and weight, blood pressure)
- 105 • HbA1c test unless your child has had one within the past 2 weeks
- 106 • Additional blood tests if the study doctor has any concerns about medical conditions that  
107 might put your child at risk in the study
- 108 • Urine pregnancy test if your child is a female who can become pregnant. The pregnancy  
109 test must be negative in order for your child to participate and will be repeated at some  
110 follow-up clinic visits during the study.

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111

112 We will give your child a study blood glucose meter and blood ketone meter to use during the  
113 study. You and your child will need to perform a ketone test if your child’s glucose level is  
114 greater than 300 mg/dL for more than 1 hour, or greater than 400 mg/dL at any time. We will  
115 give you and your child instructions on how to use and maintain your meters.

116

117 You and your child will be asked to keep a glucagon emergency kit on hand at home. If you and  
118 your child need a prescription for the glucagon emergency kit, you can ask your study doctor.

119

120 The screening visit will last 1 to 2 hours.

121

#### Initial CGM Use

122 If your child has used a CGM that is the same as the study CGM for at least 21 out of the last 28  
123 days, your child will skip to the Main Phase of the study described below. Otherwise, your child  
124 will use the study CGM as described here.

125

126  
127 First, your child will wear the study CGM for 2 weeks without being able to see the glucose  
128 numbers it records. This is called a “blinded” CGM.

129

- You and your child will be taught how to use the “blinded” study CGM, including  
130 putting in a new sensor after 7 days (or sooner if the sensor falls out).

131

- You and your child will use the “blinded” study CGM at home for 2 weeks. You  
132 and your child should follow your normal routine during this time for meals,  
133 fingersticks, and insulin boluses. If your child was using a personal CGM before  
134 entering the study, your child may continue to use it.

135

- You and your child will return for a follow-up clinic visit after 2 weeks.

136

- Study staff will download the “blinded” study CGM data to determine if your child  
137 wore it often enough to continue in the study—at least 11 out of 14 days. They  
138 will also check for any skin reaction in areas where your child wore the CGM.

139

- Study staff may suggest changes to your child’s insulin pump settings to help  
140 your child improve blood sugar control.

141

142 If your child is allowed to continue, study staff will change the CGM settings so you can see the  
143 CGM glucose values. Your child will wear the study CGM for 2 more weeks at home. This is  
144 called an “unblinded” CGM.

145

- You and your child will be trained how to use the CGM information in your  
146 child’s diabetes management.

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- 152
- 153
- Study staff will download the “unblinded” study CGM data to determine if your child wore it often enough to continue in the study—at least 11 out of 14 days. They will also check for any skin reaction in areas where your child wore the CGM.
  - Study staff may suggest changes to your child’s insulin pump settings to help your child improve blood sugar control.

#### 154 **Main Phase**

155 If your child skipped the CGM Use phase above, the procedures described below could occur as  
156 part of the Screening visit. Otherwise, a separate visit will occur at least 4 weeks after the  
157 Screening visit.

158

159 If your child qualifies to start the main phase of the study, you and your child will again be asked  
160 if you have any questions about the study. We want to make sure that if you and your child  
161 continue, you understand the study and feel that you and your child can follow the procedures  
162 needed in either study group.

163

164 We will draw blood for another HbA1c test. The blood will also be used for a C-peptide test.  
165 This measures whether your child’s body makes any of its own insulin. Everyone in the study  
166 will complete some questionnaires. Topics will include a personality assessment, hypoglycemia  
167 awareness, low and high blood sugar, and your child’s feelings about managing his or her  
168 diabetes.

169

170 At this visit, a computer program will be used to select whether or not your child will be given  
171 the closed-loop study system or use the study CGM with your child’s own insulin pump.  
172 Through a process similar to flipping a coin, your child will be assigned to either the closed-loop  
173 group or the SAP group for the rest of the study. Your child will have a 50/50 chance of being in  
174 either group. Neither you, your child, nor the study staff will have a choice in which group your  
175 child will be placed.

176

177 You, as the parent, will also be asked to fill out a questionnaire on how you feel about your child  
178 using a closed-loop system to manage his or her diabetes.

179

180 You will receive diabetes education. The education will cover key parts of diabetes  
181 management.

182  
183

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184 SAP Group

185 If assigned to this group, your child will use his/her personal insulin pump along with the study  
186 CGM at home. We will call you and your child after the first week to see how your child is  
187 doing. You and your child will come back to the clinic after the second week so we can answer  
188 any questions you and your child may have and review your child's data. Study staff may  
189 suggest changes to help you improve your child's blood sugar control. Your child will then  
190 continue to use the study CGM and personal pump for about 13 weeks at home. You and your  
191 child will have a series of phone contacts and clinic visits during this period as shown in Table 1  
192 below.

193  
194 You and your child will be asked to upload data from study devices at different times during the  
195 study. You and your child will be given all necessary equipment to do this.

196  
197 Closed-Loop Group

198 If assigned to this group, you and your child will be trained to use the study pump on its own.  
199 You and your child will also be trained to use the closed-loop study system to control the study  
200 pump. You and your child will be fully-trained to use the study system in all modes of operation  
201 similar to your child's personal insulin pump. Using the study system in closed-loop mode will  
202 automatically adjust your child's insulin delivery based on the CGM glucose readings. You and  
203 your child can always stop the study system at any time and take over control of your child's  
204 insulin pump. Your child will also wear a blinded CGM sensor as described above during the  
205 first two weeks of home use.

206  
207 Training may happen during a single visit or two visits to the clinic. By the end of training, you  
208 and your child will be expected to perform certain tasks without help from study staff members.  
209 You and your child will be given a printed User Guide as a reference.

210  
211 ***At-Home Study Procedures***

212 Your child will use the study system at home day and night for a 1-week period and then have a  
213 phone call with study staff to review your experience. Your child will continue to use the study  
214 system for a second week followed by a clinic visit for training review and to answer any  
215 questions you and your child have. Study staff may suggest changes to help improve your  
216 child's blood sugar control. Then your child will use the study system at home for about  
217 13weeks. You and your child will have a series of phone contacts and clinic visits during this  
218 period as shown in Table 1 below.

219



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220 Your child should use the study system in closed-loop mode whenever possible. In the following  
221 situations you should contact study staff to determine whether temporarily to stop closed-loop  
222 use:

- 223 • Your child has a fever above 101.5 degrees Fahrenheit
- 224 • Your child has a major illness
- 225 • Your child needs to use certain medications including epinephrine (e.g. for the  
226 emergency treatment of a severe allergic reaction or asthma attack) or oral or  
227 injectable glucocorticoids; details will be provided to you and your child on a  
228 written instruction sheet

229  
230 You and your child will be provided with an Emergency Card with information about the study  
231 system to carry with you at all times while participating in the study in the event you need  
232 emergency medical care.

233  
234 The study system will transfer CGM and pump data to a central database every few minutes  
235 when the study smartphone is connected to the internet. The system must be connected to the  
236 internet at least once per week.

237  
238 You and your child will be able to contact study staff at any time with a question, problem, or  
239 concern.

#### 240 ***Scheduled Clinic Visits***

241 The schedule for clinic visits is the same for everyone in the study. The main reason for these visits  
242 is to troubleshoot any problems and ask you and your child about any changes in your child's  
243 health.

244  
245  
246 Follow-up visits will occur at 5 weeks, 9 weeks, and 13 weeks.

247  
248 The following procedures will be performed in both groups at each visit, unless otherwise listed  
249 below:

- 250 • Assessment of study device use (*except 9-week visit*)
- 251 • Review of any problems or events that have occurred (*except 9-week visit*)
- 252 • Download of study device data
- 253 • Blood draw for HbA1c (*13-week visit*)
- 254 • Insertion of a blinded CGM device as described above (*9-week visit*)

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256

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257 ***Scheduled Phone Calls***

258 In addition to the 1-week phone call described above, study staff will call you and your child at 34  
259 weeks. The schedule for these calls is the same for everyone in the study.

260

261 **34-Week Phone Call Procedures**

- 262 • Discussion of your child’s use of the study devices
- 263 • Discussion of any changes in your child’s health
- 264 • Review of available study device data to identify any safety issues

265

266 ***Final Visit (13-week Visit)***

267 The final study visit will be at least 13 weeks after the Screening visit. Procedures will be similar  
268 to those described for the Screening and follow-up visits. You and your child will return some or  
269 all study devices as instructed by study staff. If needed, your child will be switched back to the  
270 pump he or she was using before entering the study. You and your child will complete another set  
271 of questionnaires with similar topics as before. There will be a final blood draw for HbA1c tests.  
272 Height and weight measurements will also be repeated.

273

274 Table 1 summarizes what will happen at each call and visit during the main study phase.

275

276 **Table 1: Main Phase of Study**

277

	<b>Week of Study:</b>						
	<b>0</b>	<b>1w</b>	<b>2w</b>	<b>3w</b>	<b>5w</b>	<b>9w</b>	<b>13w</b>
<b>Clinic Visit (V) or Phone Call (P)</b>	<b>V</b>	<b>P</b>	<b>V</b>	<b>P</b>	<b>V</b>	<b>V</b>	<b>V</b>
<b>Review if your child can continue in the study</b>	<b>X</b>						
<b>Pregnancy Test</b>	<b>X</b>						
<b>Blinded CGM (2 weeks)</b>						<b>X</b>	
<b>Blood draw for HbA1c</b>	<b>X</b>						<b>X</b>
<b>Blood draw for C-peptide test</b>	<b>X</b>						
<b>Study device download</b>	<b>X</b>		<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>
<b>Review diabetes management and any new medical problems</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>
<b>Study questionnaires</b>	<b>X</b>						<b>X</b>



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278 **Additional Study Procedures**

279 If your child is a female and menstruating, she may be asked to keep a log of when her menses  
280 occur to see the impact it has on her blood sugars. You and your child may choose not to  
281 participate in this part of the study. If you participate, you and your child will be given a paper  
282 log to record this information for the study team. This will help to us to better understand blood  
283 sugar fluctuations and insulin requirements during menses and the impact of the closed-loop  
284 system. You and your child’s decision to participate, or to not participate, in these additional  
285 procedures will not affect your child’s ability to be in this study.

286  
287 **ARE THERE RISKS IN THIS STUDY?**

288 Taking part in research often involves some risks of physical or psychological injury or discomfort.  
289 The most likely risks of this study are described below. These deserve careful thought. This study  
290 may include risks that are unknown at this time.

291  
292 Risks related to your child’s normal medical care are not listed in this form. We encourage you  
293 and your child to discuss these with your child’s study doctor, your child’s primary care  
294 provider, or another health care professional.

295  
296 Risk of Low Blood Sugar

297 As with any person who uses insulin, there is always a risk of having low blood sugar  
298 (hypoglycemia). Low blood sugar should not happen more often during the study than before the  
299 study. Symptoms of low blood sugar can include:

- 300 • sweating
- 301 • shaking
- 302 • not feeling well
- 303 • fainting
- 304 • seizures (convulsions)

305 In very rare cases low blood sugar can lead to brain damage or death. Even if low blood sugar does  
306 occur, it almost always goes away quickly with treatment to raise the blood sugar.

307  
308 Risk of High Blood Sugar

309 High blood sugar also should not happen more often during the study than before the study. High  
310 blood sugar usually does not cause many obvious symptoms, but your child may become thirsty or  
311 have a higher level of sugar in your urine. In severe cases, diabetic ketoacidosis (DKA) or coma  
312 may occur. DKA can lead to kidney failure, irregular heartbeat, heart attack, muscle breakdown,  
313 and even death.

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314

315 Fingerstick Risks

316 About 2 drops of blood will be removed by fingerstick to test blood sugar levels. It hurts when the  
317 needle goes into your child’s finger but not for long. In about 1 in 10 times, a small amount of  
318 bleeding under the skin will produce a bruise. A small scar may persist for several weeks. The risk  
319 of an infection is less than 1 in 1000.

320

321 Blood Draw Risk

322 Possible risks from blood draws include:

- 323 • Pain (common)
- 324 • Bruising (common)
- 325 • Redness (common)
- 326 • Temporary discomfort from the needle stick (common)
- 327 • Clotting (unlikely)
- 328 • Excessive bleeding (unlikely)
- 329 • Lightheadedness (rare)
- 330 • Infection (rare)
- 331 • Fainting (rare)
- 332 • Swelling of tissue (rare)

333

334 Total blood loss during this study is approximately 15 milliliters or about 3-4 teaspoons.

335

336 Insulin Pump Therapy Risks

337 The risks of using an insulin pump may include:

- 338 • Discomfort during insertion of the infusion set (common)
- 339 • Bruising at the site of infusion set insertion (common)
- 340 • Bleeding at the site of insertion (rare)
- 341 • Infection at the site of insertion (rare)
- 342 • Allergy to the infusion set or adhesive (rare)
- 343 • Insulin pump malfunction and mechanical problems (rare)
- 344 • Allergy to insulin (very rare)
- 345 • Changes to your child’s skin (very rare)

346

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#### 347 Continuous Glucose Monitoring Sensor Risk

348 Potential risks from using a CGM include:

- 349 • Discomfort when the sensor is inserted into the skin (common)
- 350 • Itchiness, redness, bleeding and bruising at the insertion site (unlikely to rare)
- 351 • Tape allergies (rare)
- 352 • Infection at the site of sensor insertion (rare)

353

#### 354 Study System Risks

355 There is a risk that parts of the closed-loop study system may not work properly. As a result, your  
356 child could receive less or more insulin than your child needs and be at risk for high or low blood  
357 sugars. The following are some common ways the study system might not work correctly:

- 358 • CGM sensor reads higher or lower than your actual glucose level
- 359 • CGM sensor stops working or cannot communicate with the study system. If this occurs, the  
360 pump will start delivering your child's normal insulin rate within 30 minutes.

361

#### 362 Risk of Reusing the Continuous Glucose Monitor

363 The FDA approved the continuous glucose monitor as a "single use device." This means that  
364 they recommend that only one person use this device as there is a rare risk that a blood-borne  
365 pathogen, such as Hepatitis B, may be spread if used with multiple patients. In the study, we  
366 may reuse CGM receiver or transmitter parts after careful cleaning. The sensors will not be  
367 reused.

368

#### 369 Risk of Reusing the Blood Glucose Meter or Ketone Meter

370 The FDA approved these meters for "single-patient use." This means that they recommend that  
371 only one person use this device as there is a rare risk that a blood-borne pathogen, such as  
372 Hepatitis B, may be spread if used with multiple patients. In the study, we do not plan to reuse  
373 these meters.

374

#### 375 Risk of Reusing the Insulin Pump

376 The FDA approved the insulin pump for "single-patient use." They suggest that only one person  
377 use this device as there is a rare risk that a blood-borne pathogen, such as Hepatitis B, may be  
378 spread if used with multiple patients. In the study, the insulin pump may be reused after careful  
379 cleaning.

380

#### 381 Risks for Women

382 If your child is pregnant or gets pregnant during the study, please tell us. We do not know how the  
383 study may affect an unborn baby, so your child will not be able to join or stay in the study. A

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384 pregnancy test will be done during the Screening visit and will be repeated during the study if your  
385 child could possibly become pregnant. If your child is female and sexually active, she must use an  
386 approved form of birth control during the study.

387

388 Questionnaires

389 The questions asked on the questionnaires will include questions about you and your child’s  
390 personal attitudes, and behaviors related to diabetes. It is possible you and your child may find  
391 these questions to be upsetting. Similar questionnaires have been used in other studies, and this  
392 reaction is uncommon. You and your child can refuse to answer any questions that make you and  
393 your child feel uncomfortable. You and your child can decide not to answer questions, take a  
394 break, or stop taking part in the study at any time. There are no physical risks present. Many  
395 precautions will be made to keep and your child’s information confidential, but this is not a  
396 guarantee.

397

398 Unknown Risks

399 There may be additional risks associated with the study system that are not known at this time.  
400 If we become aware of any new risks, you and your child will be told about them. You will be  
401 able to decide if you and your child want to continue to take part in this study.

402

403 Loss of Privacy

404 Study staff will do their best to make sure that you and your child’s private information is kept  
405 confidential, but participating in research may involve a loss of privacy and the potential for a  
406 breach of confidentiality. All information about you and your child will be replaced with a code.  
407 A list linking the code and you and your child’s information will be kept separate from the  
408 research data.

409

410 Information about your child’s data uploaded from your child’s study devices will be collected for  
411 the study and transmitted through a secure electronic system to the Jaeb Center for Health Research  
412 in Tampa, Florida. This center is coordinating the study. It reviews all of the study information that  
413 is collected. The Jaeb Center for Health Research will be reviewing the data, but will not have  
414 your child’s personal information.

415

416 The blood glucose meter used in the study is made by a company called Ascensia. Data from the  
417 meter will be downloaded by study staff during clinic visits using software at the clinic. You and  
418 your child should not try to use any other software to download data from the meter. This  
419 includes software from Ascensia called the CONTOUR DIABETES app. Your child’s data may

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420 not remain confidential if you use this app or other software to download the data. Study staff  
421 will remind you about this during the study.

422

**423 WHAT ARE THE BENEFITS OF MY CHILD TAKING PART IN THIS STUDY?**

424 There may be a possible medical benefit to you and your child if you decide to take part in the  
425 study, but it is not a guarantee. For instance, it is possible that your child’s blood sugar control  
426 will improve during the study using the study system or using just your child’s insulin pump with  
427 CGM. If your child’s is just using the insulin pump, the blood sugar information from the CGM  
428 along with the instructions given for management changes will be useful for your child’s  
429 diabetes control.

430

431 Your child may receive no direct benefit from being in the study. Children who take part in this  
432 research study will add new knowledge that may help other children with type 1 diabetes.

433

**434 WHAT ALTERNATIVE PROCEDURES OR TREATMENT ARE AVAILABLE IF MY  
435 CHILD DOES NOT TAKE PART IN THIS STUDY?**

436 If your child does not take part in this study, he/she could continue using his/her current insulin  
437 pump. You and your child could also talk with your child’s doctor about other ways to take  
438 insulin. If your child does not participate, your child’s medical care will not be affected.

439

440 We encourage you and your child to discuss these options with your child’s study team, you and  
441 your child’s general primary care physician, or another health care professional who has  
442 knowledge of type 1 diabetes.

443

**444 WHAT IF I WANT TO WITHDRAW MY CHILD FROM THE STUDY OR MY CHILD  
445 WISHES TO WITHDRAW FROM THE STUDY?**

446 You or your child can stop their participation in this study at any time. However, we encourage  
447 you to talk to a member of the study team so they know why your child is stopping the study.

448

449 If there are any new findings during the study that may affect your child’s participation, you will  
450 be told about them so you can decide if you want to continue.

451

452 No penalty or loss of medical care will result from your decision. Your child may continue to  
453 receive medical care not related to this study.

454

**Consent to Participate in a Research Study**

***Clinical Acceptance of the Artificial Pancreas: The International Diabetes Closed Loop (iDCL) Trial - A Randomized Clinical Trial to Assess the Efficacy of Adjunctive Closed Loop Control Versus Sensor-Augmented Pump Therapy in the Management of Type 1 Diabetes***

455 The study doctor may decide to stop your child’s participation without your permission if he or  
456 she thinks that being in the study may cause your child harm. Some possible reasons for this  
457 include:

- 458 • the study doctor decides that continued participation is not safe for your child, especially if
- 459 they have a severe low blood sugar or DKA
- 460 • your child needs treatment not allowed in the study
- 461 • failure to follow instructions
- 462 • the study is canceled

463

**ARE THERE COSTS RELATED TO MY CHILD TAKING PART IN THE STUDY?**

464 Testing that is specifically for this study will be paid for by the study. The costs of treatment,  
465 office visits, and tests that are part of your child’s type 1 diabetes care will be your or your  
466 insurance company’s responsibility. The study will pay for:

- 467 ➤ CGM-pump system, system supplies, and smartphone (closed-loop group)
- 468 ➤ CGM sensors (both treatment groups)
- 469 ➤ Blood glucose meter, test strips, and control solution (both treatment groups)
- 470 ➤ Blood ketone meter, test strips, and control solution (both treatment groups)
- 471 ➤ Blinded CGM (both treatment groups)

472

473  
474 At the end of the study, or if you and your child decide to leave the study, you must return the  
475 study system parts to the study team listed on the Cover Page.

476

477 All other tests and procedures, including your child’s own insulin, and other medical problems  
478 that would happen even if your child as not in this study are your or your insurance company’s  
479 responsibility.

480

**IS THERE COMPENSATION FOR MY CHILD TAKING PART IN THIS STUDY?**

481 If your child takes part in the study, you will be paid \$50 for each completed office visit required  
482 for the study to cover travel and other visit-related expenses. You will not receive any  
483 compensation for extra visits your child’s doctor believes are needed for your child’s usual care.

484

**WHAT HAPPENS IF MY CHILD EXPERIENCES A RESEARCH RELATED INJURY?**

485  
486 Medical care is available if you and your child have a research-related injury. If you and your  
487 child have an emergency, you and your child can get emergency care. If possible, you and your  
488 child should tell the emergency care medical staff that you and your child are in a research study.  
489 You and your child should also tell your study team about the emergency as soon as possible.

490



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492 The study will not provide costs for medical expenses or any other costs for research-related  
493 injuries. The costs of care are your or your insurance company’s responsibility. Money for lost  
494 wages or direct or indirect losses is not available.

495

**CONTACT INFORMATION FOR QUESTIONS OR PROBLEMS**

496 If you or your child have questions about this study, a research-related injury, have concerns,  
497 suggestions or questions about the study, contact your study team using the provided contact  
498 information on the Cover Page.

499

500

501 If you have unanswered questions about your child’s rights as a research participant, wish to talk  
502 about your concerns or suggestions linked to the research study, want additional information  
503 about the research, or want to provide comments about the research, contact the Jaeb Center for  
504 Health Research Institutional Review Board (IRB) Office at 813-975-8690 or [irb@jaeb.org](mailto:irb@jaeb.org)

505

**HOW WILL MY CHILD’S INFORMATION BE PROTECTED AND KEPT  
506 CONFIDENTIAL?**

507

508 As required by law, study-related records with identifying information are confidential.  
509 Safeguards for authorized access, security, and privacy of your child’s information are required  
510 by Federal Privacy Regulations. Unless the law requires it, your child’s name, address, social  
511 security number, telephone number, or any other direct identifying information will not be used  
512 to identify you or your child.

513

**A. Purpose of Authorization**

514

515 We have rules to protect information about your child. Federal and state laws and the federal  
516 medical Privacy Rule also protect your child’s information. By signing this form you are giving  
517 your permission, called your “authorization,” for the use and disclosure of information protected  
518 by the Privacy Rule.

519

520 You must sign the **Protected Health Information Authorization** at the end of this form if you  
521 want your child to be in the study. When you sign the form, you give permission for the use and  
522 disclosure of your child’s Protected Health Information (PHI) for the study. PHI is health  
523 information that identifies your child for this study. Without your signed permission, your child  
524 will not be able to be in this research study.

525

**B. Use and Disclosure of the PHI**

526

527 Your child’s study doctor will collect information about your child. This information includes  
528 things learned from procedures listed and described in this form as well as his or her name,

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529 address, date of birth, and information from medical records. Your child’s name, address,  
530 telephone number, and social security number are examples of identifiable information.

531  
532 A code number will replace your child’s name, address, telephone number, or social security  
533 number in the results given to the study coordinating center which is the Jaeb Center for Health  
534 Research in Tampa, Florida.

535  
536 The study doctor’s office will not disclose study results that have identifiable information except  
537 as explained in Section C. or when required by law. The Jaeb Center and this doctor’s office will  
538 guard the privacy of your child’s study PHI.

539  
540 Study results without the protected information may be shared in medical journals and at  
541 scientific meetings. Your child’s records will be confidential. No one will disclose the identity  
542 of your child in a medical journal or at a scientific meeting.

543  
544 **C. Authorized Recipients and Users**  
545 It is possible people outside of this doctor’s office and the Jaeb Center may need to see or receive  
546 your child’s information for this study. Some examples include: government agencies (such as  
547 the U.S. Food and Drug Administration), committees that monitor safety, other sites in the study,  
548 and companies that are sponsors.

549  
550 In most cases the information will use a code number instead of your child’s name, address,  
551 telephone number, or social security number.

552  
553 There are some cases where the information will not use a code number but may include your  
554 child’s name, address, telephone number or social security number (HPI). If so, people outside  
555 this doctor’s office who assist in your child’s care may see your child’s study PHI. They may  
556 not be covered by the federal Privacy Rule. Everyone who needs to see your child’s information  
557 will be told it is confidential – but we cannot guarantee full confidentiality.

558  
559 **D. Other Considerations**  
560 The data collected in the study and provided to other researchers will not contain any  
561 information that could identify your child.

562  
563 When the results are made public, all of the study data collected may also be made public.  
564 However, there will be no identifying information included.

565

**Consent to Participate in a Research Study**

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566 A description of this clinical trial will be available on <http://www.ClinicalTrials.gov>, as required  
567 by U.S. Law. This Web site will not include information that can identify you. At most, the  
568 Web site will include a summary of the results. You and your child can search this Web site at  
569 any time.

570

**E. Cancellation of HIPAA Authorization**

571 You may cancel your permission for the use and disclosure of your child’s study PHI at any  
572 time. You need to contact your child’s study doctor and give notice of your cancellation in  
573 writing. When you cancel your permission or when you withdraw your child from the study  
574 directly, your child is no longer part of the study. No new information about your child will be  
575 gathered for the study except when there is an adverse (unfavorable) event that is related or  
576 potentially related to the study. If an adverse event happens, your child’s entire medical record  
577 may need to be reviewed.

578

579 The Jaeb Center will receive all the information that has been collected for the study up to the  
580 time of cancellation or withdrawal. The Jaeb Center will receive any new information about any  
581 adverse (unfavorable) event that is related or potentially related to the study.

582

**F. 50 Year Expiration Date and Indefinite Expiration Date**

583 Some of your child’s study PHI does not have a code number with it. Your permission for the  
584 use and disclosure of this PHI lasts 50 years from the date of your signature or until the end of  
585 the study, whichever is sooner.

586

587 The rest of your child’s study PHI does have a code number with it. When collected, it becomes  
588 a research report. Your permission for the use and disclosure of coded data will never end.

589 These coded data do not have your child’s name, address, telephone number, or social security  
590 number. *The above supports the HIPAA Privacy Rule – 45 CFR 164.508*

591

592

593

**Consent to Participate in a Research Study**

*Clinical Acceptance of the Artificial Pancreas: The International Diabetes Closed Loop (iDCL) Trial - A Randomized Clinical Trial to Assess the Efficacy of Adjunctive Closed Loop Control Versus Sensor-Augmented Pump Therapy in the Management of Type 1 Diabetes*

594 **STANFORD UNIVERSITY LOCAL REQUIRED LANGUAGE**

595

596 **Research-Related Injury**

597 This portion is complementary to the section **WHAT HAPPENS IF MY CHILD**  
598 **EXPERIENCES A RESEARCH RELATED INJURY?**

599

600 All forms of medical diagnosis and treatment – whether routine or experimental – involve some  
601 risk of injury. In spite of all precautions, you might develop medical complications from  
602 participating in this study. If such complications arise, the Protocol Director and the research  
603 study staff will assist you in obtaining appropriate medical treatment. In the event that you have  
604 an injury or illness that is directly caused by your participation in this study, reimbursement for  
605 all related costs of care first will be sought from your insurer, managed care plan, or other  
606 benefits program. **You will be responsible for any associated co-payments or deductibles as**  
607 **required by your insurance.**

608

609 If costs of care related to such an injury are not covered by your insurer, managed care plan or  
610 other benefits program, you may be responsible for these costs. If you are unable to pay for such  
611 costs, the Protocol Director will assist you in applying for supplemental benefits and explain how  
612 to apply for patient financial assistance from the hospital.

613

614 You do not waive any liability rights for personal injury by signing this form

615

616 **CA Bill of Rights**

617 As a research participant, you have the following rights. These rights include but are not limited  
618 to the participant's right to:

619

620 • be informed of the nature and purpose of the experiment;  
621 • be given an explanation of the procedures to be followed in the medical experiment, and any  
622 drug or device to be utilized;

622 • be given a description of any attendant discomforts and risks reasonably to be expected;

623 • be given an explanation of any benefits to the subject reasonably to be expected, if  
624 applicable;

625 • be given a disclosure of any appropriate alternatives, drugs or devices that might be  
626 advantageous to the subject, their relative risks and benefits;

627 • be informed of the avenues of medical treatment, if any available to the subject after the  
628 experiment if complications should arise;

629 • be given an opportunity to ask questions concerning the experiment or the procedures  
630 involved;

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- 631 • be instructed that consent to participate in the medical experiment may be withdrawn at any
- 632 time and the subject may discontinue participation without prejudice;
- 633 • be given a copy of the signed and dated consent form; and
- 634 • be given the opportunity to decide to consent or not to consent to a medical experiment
- 635 without the intervention of any element of force, fraud, deceit, duress, coercion or undue
- 636 influence on the subject's decision.

637

**Stanford University HIPAA Authorization**

638 In order to participate in this study, you must also sign the Stanford University HIPAA  
639 Authorization Form.  
640

641 With your permission, we may photograph or videotape you and your child's participation in this  
642 trial. Photographs and videotapes will be used in presentations at conferences, potential study  
643 subjects, and potential research donors. Your willingness to have photos taken is independent of  
644 your participation in this trial. Your photo or videotape will not be used without your consent.  
645 Your identity can remain anonymous.

I agree to be photographed/videotaped during this trial.

\_\_\_\_\_  
Initials

I agree to be photographed/videotaped during this trial but would like to remain anonymous.

\_\_\_\_\_  
Initials

I do **NOT CONSENT** to being photographed/videotaped during this trial.

\_\_\_\_\_  
Initials

646

**Consent to Participate in a Research Study**

***Clinical Acceptance of the Artificial Pancreas: The International Diabetes Closed Loop (iDCL) Trial - A Randomized Clinical Trial to Assess the Efficacy of Adjunctive Closed Loop Control Versus Sensor-Augmented Pump Therapy in the Management of Type 1 Diabetes***

647 **Child's Full Name** (printed) \_\_\_\_\_

648

649 \_\_\_\_\_

650 **Your Full Name** (printed)

651

652 \_\_\_\_\_

653 **Description of Your Authority to Act for the Child**

654

655 \_\_\_\_\_

656 **Your Full Name** (printed)

657

658 \_\_\_\_\_

659 **Description of Your Authority to Act for the Child**

660

661

662 **Protected Health Information Authorization**

663

*By signing, you authorize the use and disclosure of your child's protected health information as described in this document and collected as part of your child's participation in this study.*

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

664

665



**Consent to Participate in a Research Study**

***Clinical Acceptance of the Artificial Pancreas: The International Diabetes Closed Loop (iDCL) Trial - A Randomized Clinical Trial to Assess the Efficacy of Adjunctive Closed Loop Control Versus Sensor-Augmented Pump Therapy in the Management of Type 1 Diabetes***

666  
667

**Study Enrollment**

*By signing, you agree for your child to take part in this study. Your signature means that:*

- *you have read this informed consent form about the study named below;*
- *you have been given a chance to discuss the study and to ask questions;*
- *you have verbally summarized your understanding of the study to the person who is explaining it to you; and*
- *you freely choose to have your child participate.*

**Name of Study:** Clinical Acceptance of the Artificial Pancreas: The International Diabetes Closed Loop (iDCL) Trial - A Randomized Clinical Trial to Assess the Efficacy of Adjunctive Closed Loop Control Versus Sensor-Augmented Pump Therapy in the Management of Type 1 Diabetes

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Signature Date

*I certify that to the best of my knowledge the parent(s) understand(s) the nature, demands, risks, and benefits involved in his/her/their child's participation in this study.*

\_\_\_\_\_  
Investigator's Printed Name Investigator's Signature Date

668  
669

**You will be given a signed copy of this document in case you want to read it again.**