At a glance: Ketac[™] Family & Friends – for patient and dentist.

| PATIENTS | Photac [™] Fil Quick | Ketac [™] Molar Quick | Ketac Molar | Vitremer™ | Ketac Fil Plus | Ketac Silver |
|---------------------------------------------|----------------------------------|-----------------------------------|-------------|-----------|----------------|--------------|
| Quick treatment with uncooperative patients | ٠ | • | | | | |
| Self-adhesive | • | • | • | • | • | • |
| Use without conditioning | • | | | | | |
| Time saved due to light cure | • | | | • | | |
| Use of strontium glass | • | | | | • | |
| Level of fluoride release | ++++ | + | + | ++ | +++ | ++ |
| High abrasion resistance | | • | • | | | • |
| Deciduous teeth fillings | • | • | • | • | • | |
| Fissure sealing | | • | • | | | |
| Interim fillings | • | • | • | • | • | • |
| Permanent fillings Class I | | • | • | • | | |
| Core build-up | | • | • | • | | • |
| Use in case of xerostomy | • | | | • | • | |

| DENTISTS | Photac Fil Quick | Ketac Molar Quick | Ketac Molar | Vitremer | Ketac Fil Plus | Ketac Silver |
|--------------------------------------------------------------------------|---------------------|----------------------|---------------------------|----------|----------------|--------------|
| Available in capsules for consistent, homogeneous material quality | • | • | • | | • | • |
| Narrow capsule nozzle for direct, targeted application | • | • | | | • | • |
| Granulated powder for easy mixing | | | Ketac Molar Easymix | | | |
| Low viscosity for good flow | • | | | | • | |
| High viscosity with "packable" consistency | | • | | • | | |

3M ESPE

Play all the trumps for your patients.

Ketac Family&Friends



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Patient-Oriented Dentistry with Glass Ionomer Restoratives

- Reduces the risk of secondary caries due to fluoride release
- Quick and easy treatment with fewer steps
- Long-lasting in recommended clinical indications
- Versatile, when help is needed fast

Glass ionomers from 3M ESPE – you get excellent clinical performance.

Put 3M ESPE's experience and competence to work when you use our glass ionomer filling materials. Versatile, reliable and carefully fine-tuned products allow you to help your patients quickly and efficiently in many situations.

For decades, 3M ESPE has been the trailblazer in the glass ionomer success story. Just like you as a dentist, we see a real need for differentiated therapy. Thus, glass ionomers are only part of our comprehensive product offering. It's true that they don't represent a universally applicable restoration material, but they provide excellent results with little effort for many indications.

The result: A perfect solution for any type of patient.

Not all patients are alike - and that's another important reason for differentiated therapy. Depending on each patient group's needs, your daily practice faces different typical demands:







Patients in pair

Older adults

3M ESPE glass ionomers make it easy for you to respond to the needs and wishes of very different patient groups. They allow you to provide immediate help in a wide range of situations, and thus give you more time to get to the root of the real problem (for example, periodontal disease or a high risk of caries) and find the right solution. And that means satisfied patients and less stress for you.

Here's the proof: Glass ionomers prevent caries in older patients.

Seniors are especially susceptible to caries. Xerostomy, or dry mouth (e.g. due to medications), plays a role, as does impaired oral hygiene because of reduced motor skills. 3M ESPE glass ionomers significantly reduce the risk of secondary caries: because of their high fluoride release levels, they remineralize the teeth and protect against caries - and that gives you more assurance that you're doing the best for your patients.



Root caries - a frequent problem in geriatric dentistry - quickly and permanently solved with 3M ESPE glass ionomers, e.g. Photac[™] Fil Quick.

Lasting protection against caries:

After treatment with 3M ESPE's Vitremer[™] und Ketac[™] Fil Plus glass ionomers, patients with a high risk of caries had significantly less secondary caries around the margins of their fillings than a control group with amalgam fillings.



Photac[™] Fil Quick shows great fluoride release:

A comparative study shows that, from the start, Photac Fil Quick achieved top measurements for fluoride release. That means the best possible protection from secondary caries and makes follow-up treatment unnecessary in many cases.



Ketac[™] Family & Friends – a winning hand for you and your patients.

- PROTECTS AGAINST CARIES OVER THE LONG TERM 3M ESPE glass ionomers offer increased protection against new occurrences of secondary caries.
- QUICK AND EASY TO USE especially with impatient children or anxious patients.
- LONG-LASTING BASIS FOR LONG-TERM RESTORATIONS a speedy route to a definitive solution for your patients.
- MULTIFUNCTIONAL, WHEN HELP IS NEEDED FAST so you can quickly ease your patients' pain.

Measurement period in weeks

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Haveman, J.B. Summitt, J.O. Burgess, K. Carlson, JADA 2003; 134: 177-184



Ketac[™] Molar Aplicap[™] A3

A. Svrek, 2nd European Conference on Glass Ionomers, 2004, Warwick

 Reduces the risk of secondary caries due to fluoride release

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| Kids want it over fast – but you want | |
|---------------------------------------|--|
| the work to last. | |

Kids are in a particular hurry to get down out of the dentist's chair. So it's a real plus if you can work quickly, but still carefully. Treatment with Photac™ Fil Quick means that you can put in a perfect glass ionomer filling with just a few quick steps. So your little patients are "set free" as soon as possible and you avoid unnecessary stress.

Lightning visits to the dentist – thanks to Photac Fil Quick:

| Step-by-Step Comparison* | Prepare tooth | Apply a conditioner | Rinse and dry | Act. a mix capsule | Place in 2-mm increments | Light cure | Finish | Apply glaze or varnish | Light cure |
|-----------------------------|---------------|---------------------|---------------|--------------------|-----------------------------|------------|--------|---------------------------|------------|
| Photac [™] Fil | | | | | | | | | |
| Fuji II LC | | | | | | | | | |

* According to manufacturers' instructions for use

Light polymerization saves a lot of time. And compared to Fuji II LC, there are four fewer treatment steps for the exact same result!** Especially with children, who can rarely sit still for more than a few minutes at the dentist's, that's a real advantage. ** M. Tanumiharja, et. al.: J Dent, 2000; 28: 361-6

You reach your goal faster and easier.



No rubberdam needed and four fewer treatment steps: that means more comfort and less anxiety for both sides

When you need lasting protection: Ketac[™] Molar.



Fissure sealing with Ketac[™] Molar

C.J. Holmgren, E.C.M. Lo, D.Y. Hu, H.C. Wan, Community Dent Oral Epidemiol 2000: 28:314-320

Many parents would like to ensure that their children's teeth are durably protected as soon as possible and dentists feel the same way. In addition to many other indications, Ketac Molar is also ideally suited for early fissure sealing. As a tough fissure-sealing material, it offers years of effective protection against caries, as demonstrated by a multi-center study.



Less drilling, longer durability – that's easy for any patient to swallow.

The trend in modern dentistry is towards minimally invasive treatment. That's why one goal of any treatment should be to preserve the tooth structure as much as possible. With Ketac™ Molar, it's easy for you to give your patients tooth-coloured fillings that preserve the tooth structure. And the superior long-term durability promises a comfortably long wait before the next appointment.

Practical demonstration: Less is more.



Minimally invasive tooth-colored filling - fast, simple, durable and economical with Ketac[™] Molar Quick

Long-term stability with minimally invasive fillings.

A current multi-center study of schoolchildren in China (A.R.T.) demonstrates Ketac Molar's excellent long-term stability. After 5 years, 82% of the smaller Class I restorations were still intact.



Ketac[™] Molar – the model for glass ionomers.

Convincingly low abrasion rates: In comparison to other glass ionomers, Ketac Molar shows significantly less wear.

The often-documented durability of Ketac Molar can stand up to a comparison with other filling materials: Ketac Molar shows significantly less wear than the glass ionomer Fuji IX and the compomer Dyract in the 3-body wear study.





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Small Class I Survival

C.J. Holmgren, E.C.M. Lo, H.C. Wan, D.Y. Hu, IADR 2002 (Chiba, Japan) Abstract 959

A. Peutzfeldt, F. Garcia-Godoy, E. Asmussen, Am J Dent 1997; 10:15-17.

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No matter why your patients visit your office, they want an uncomplicated treatment that's over and done with in a minimum number of appointments. 3M ESPE's glass ionomers fit the bill: they can be successfully used for interim fillings and for core build-up. Their clinically documented successes are convincing evidence.

A material you can build on.

A clinical trial by N. H. Wilson* shows that 3M ESPE glass ionomers also constitute a durable base for long-term indirect restorations. This study involved temporary glass ionomer restorations that were prepped after three months and used as core build-ups. Thirty-nine gold crowns were attached to the cores with RelyX[™] Luting Cement (glass ionomer cement) and examined after five years. The clinical results revealed neither secondary caries nor hypersensitivity, even after five years. *N.H. Wilson et al. (in press)

A transitional solution can look this perfect...



Interim treatment with Ketac[™] Molar Quick Aplicap[™]

3M ESPE glass ionomers offer you numerous advantages while you work towards the definitive solution

- As a base, they provide effective thermal insulation for the pulp (important with gold restorations)
- They constitute an excellent dentin replacement, due to their dentin-like E-modulus • They block out undercuts
- · Because of their higher opacity compared to tooth structure, they can be precisely reduced and they protect against unpleasant surprises (e.g. pulp exposure) at the preparation appointment itself

... and the result after a few weeks:



On the base of the interim treatment, a gold inlay was luted with Ketac[™] Cem and a ceramic partial crown was placed with RelvX[™] Unicem

A real friend in need – versatile, fast and effective.

As a dentist, you face the almost daily challenge of relieving a wide range of patients - dental emergencies, people with acute pain or periodontal disease - from their suffering, as fast and effectively as possible. Each one expects a small miracle from you: they want to go home free of pain without a lengthy, stressful treatment.

Glass ionomers from 3M ESPE won't turn you into a magician, but you will be able to provide fast and effective initial treatment in many cases. These products take care of acute problems and win time for your long-term therapy plan. The result: satisfied patients who refer you to others and aren't afraid to come to their remaining appointments.

The first thing is to make the pain go away.

First you have to relieve the most serious suffering. Temporary restorations with Ketac[™] Molar make that possible. They are also ideal for anticipatory re-evaluations - for example, when you're waiting to see how a tooth reacts to caries profunda treatment or when periodontal work is required before the indirect treatment.



Interim caries profunda treatment with 3M ESPE glass ionomers

3M ESPE glass ionomers – the features you need in your day-to-day practice.

- PROTECTION AGAINST CARIES reduce the risk of unpleasant follow-up treatments you can send your patients home with a good feeling.
- QUICK AND SIMPLE TREATMENT you save time so you can see more patients.
- DURABLE in clinically relevant glass ionomer indications 3M ESPE glass ionomers are also suitable for long-term restorations - they make a flexible therapy possible.
- VERSATILE for quick relief in a variety of situations. As a dentist, you will be able to give optimal treatment to all indicated cases. Your patients will thank you.



- Quick and easy treatment with fewer steps
- Long-lasting in recommended clinical indications
- Versatile, when help is needed fast







